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411 East Wisconsin Avenue
Milwaukee, Wisconsin 53202-4497
Tel 414.277.5000
Fax 414.271.3552
www.quarles.com

Attorneys at Law in:
Phoenix and Tucson, Arizona
Naples and Boca Raton, Florida
Chicago, Illinois
Milwaukee and Madison, Wisconsin

Writer's Direct Dial: 414.277.5829
Writer's Fax: 414.978.8829
E-Mail: rschneider@quarles.com

October 29, 2004

VIA HAND DELIVERY

Craig Melodia
U.S. EPA Region 5
Office of Regional Counsel
77 West Jackson Boulevard – C-14J
Chicago, IL 60604

**RE: Response of Wisconsin Electric Power Company and Wisconsin Gas LLC to
USEPA 104(e) Information Request for Solvay Coke and Gas Site,
Milwaukee, Wisconsin**

Dear Mr. Melodia:

Enclosed with this letter please find two binders constituting the response of Wisconsin Electric Power Company and Wisconsin Gas LLC (both d/b/a We Energies) to the 104(e) Information Request for the Solvay Coke and Gas Site in Milwaukee, Wisconsin.

You previously provided an extension of time to October 29, 2004, for this response.

Thank you for your courtesies in this matter. If you have any questions regarding this letter, please do not hesitate to contact me.

Very truly yours,

QUARLES & BRADY LLP



Rachel A. Schneider

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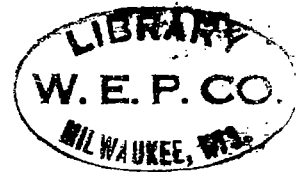
cc: Susan Martin (w/encl.)

**Response of
Wisconsin Electric Power Company
and Wisconsin Gas LLC
to USEPA 104(e) Information Request
for the Solvay Coke and Gas Site,
Milwaukee, Wisconsin**

October 29, 2004

Volume 1 of 2

COPY #1



7th History
③

HISTORICAL FACTS OF MILWAUKEE'S STREET RAILWAY SYSTEM

BY

Mr. M. G. Abendroth

MARCH, 1915

ROLLING STOCK DEPARTMENT

In presenting an historical sketch of this department it appears desirable to divide the subject into general topics and accord a separate treatment to each in order that there shall be no difficulty in following the trend of the development. The division naturally resulting would be:

A - Shops

B - Cars

C - Motive Power

It will be the attempt to outline the sketch in as brief and concise manner as possible and present accurately all facts as they were related by employes or abstracted from existing company records.

A - Shops

The period of shop development for the Milwaukee Street Railway systems before and after the consolidation of the surface lines, may be roughly grouped as follows:

1. 1860 - 1891 ----

Covering period during which each of the operating companies maintained separate establishments.

2. 1891 - 1894 ----

Covering periods during which the old Kinnickinnic Shops were in use.

3. 1894 - 1912 ----

Covering period during which the new Kinnickinnic Shops were in use.

4. 1912 - 1915 ----

This period is covered by the new Cold Spring Shop installation.

(1) Period 1860 - 1891:

Before the merger of the surface lines in Milwaukee, each of the contemporary companies operated separate shops of limited facilities.

Practically all machine work required for the maintenance of cars was done by local outside shops and mills on order from the Railway Companies. To give one an idea of the equipment in those days, it is only necessary to quote John Boden, our present Carpenter Shop foreman. Mr. Boden states that the equipment of the Cream City Company shops in 1883 consisted of a grind stone and a sawbuck. However, in addition to the machines mentioned, each company operated several forges to take care of the horse-shoeing for the system.

The shop locations for the several city lines before the consolidation were as follows:

1. The Cream City Company maintained shops in frame structures at sites where the present Farwell Avenue and Kinnickinnic Stations are located.
2. The West Side or Becker Line shops were located at 12th & Wells and 22nd & Wells. The structure at 12th & Wells was a substantial building and was only recently demolished to make room for an apartment building.
3. The Milwaukee City Railway Company shop was located on 2nd Street between Wells & Grand.
4. The Hinsey Lines maintained shops on Vliet Street near 30th Street and also on 6th & Chambers Street.

Little is known of the shop personnel prior to 1880, but it is safe to assume that each company maintained a force proportionate to the number of cars operated. In the case of the Cream City Line, we are advised that the actual shop force consisted of one man whose range of duty included all miscellaneous repairs which were not readily handled at the operating stations. Major repairs in those days consisted of wheel changes and car body repairs. Car buildings was attempted by some of the Companies but the operation was never carried out on any large scale.

Shop facilities remained stationary until the advent of the electric car. The West Side line was the first to electrify and their installation was closely followed by the Hinsey Company. Increased facilities were required

in the form of expert machinists and electrical repairmen. We might mention that we are fortunate to have in our present shop organization, several former employes of the Becker, Hinsey, Cream City and West Side properties who are now actively engaged in repair work.

(2) Period 1891 - 1894:

Shortly after the electric cars were introduced, a merger of all surface lines (1890 to 1891) were formed. Under the new management the shop buildings on Kinnickinnic Ave. were enlarged to take care of the work for the combined properties. The separate repair shops of each of the companies were dismantled and the buildings used as operating stations. The frame building on the west side of the street and occupied by stables, was torn down and a new frame structure erected to accomodate the forge shop, paint shop and carpenter shop. In the frame building on the east side of the street the south half of the building on the first floor was fitted for a machine shop while the rest of the building was occupied by the Repair and Armature Departments. These departments were formerly located in the rear of the Farwell Avenue barns. The installation of these departments was no sooner made when fire broke out resulting in the complete destruction of this shop. The machine, armature and repair departments were again installed at Farwell Avenue and work was then rushed on a new brick building of much greater proportions than any used for shop purposes heretofore. This building, which is the present Kinnickinnic operating station, was completed in 1894.

(3) Period 1894 - 1912:

The new shops were speedily equipped. The machine shop was installed in a basement room in the south part of the building. Mr. C. W. Peterson, our present machine shop foreman, supervised this work. The armature room was installed in the south-east corner of the building and the repair shop occupied the central part of the main floor. The Stores Department also had quarters in this building.

The pressing demands of the industry required further expansion. Accordingly, in 1896 the old frame structure on the west side of the street was cleared away and the present brick building was erected to provide more spacious quarters for the carpenter and paint shops. In 1896 the location of the different departments were as follows:

In the east building were installed the Machine, Repair and Armature Departments and in the west building were installed the Carpenter and Painting Departments. This arrangement remained the same until 1912 when these buildings were vacated. Also at this date the Rolling Stock Department maintained repair stations at the following locations:

21st Avenue and National
Farwell & North Avenues
Chestnut & 27th Streets
12th & Lee Streets

Equipment in the several departments expanded as the increase in company business and rolling stock demanded, until the congestion in the old Kinnickinnic Station became such a factor that efficient and economical production were hardly possible under the conditions.

(4) Period 1912 - 1915:

After considerable deliberation, the officials of the company decided upon new quarters for the shops and a thorough investigation was outlined in order to determine the design of the new buildings and equipment. Different operating companies were visited with a ^{view} view of incorporating all advanced ideas in shop construction. Upon the results of these investigations, it was decided to erect a complete shop second to none in the country. After consideration was given to several building sites, the Cold Spring location was finally decided upon.

The Cold Spring plant has been arranged to take care of the necessary shop facilities of this company for some time. The equipment embraces a sug- sufficient variety of machinery to cover all phases of car construction and maintenance.

OPERATING

OUR COLD SPRING YARD

Our lower Cold Spring storage yard for the Way and Structures is a branch of the Operating Department that very few people know about and which is seldom brought to the reader's attention. We, therefore, take this opportunity to give a little account of the work that goes on there.

The yard extends from Highland boulevard viaduct to State street along the Chicago, Milwaukee & St. Paul tracks. Brother A. H. Vosburg is in charge and Veteran Brother Geo. Maile is his first lieutenant.

Material used in all branches of the work of the Way and Structures is delivered to this yard and carried through its stores records. During the month of October there were 93 car loads of material received, consisting of crushed stone, coke, cement, ties, rails, paving brick, rail fastenings, wire fences, lumber, etc., and two car loads of scrap iron were loaded and shipped.

In addition to taking care of the incoming material it is the duty of the yard forces to load and ship all material requisitioned for track construction and reconstruction work. To give an idea of the extent of this work there were 900 cubic yards of crushed stone delivered, 6,955 ties, 15,682 feet of standard rail, 40,464 paving bricks, 122,200 pounds of asphalt, 1,156 bags of cement, and tons of bolts, rail fastenings and sundry materials.

There is also an extensive tool room where the tools used in track construction and reconstruction work are stored and repaired. Veteran Brother Nick Hayth is in charge of this branch of the yard.

Located in this yard is a sand dryer which is almost in continuous operation drying sand for use in the cars and sanding hills during wet and slippery weather.

The tie adzing machine and high speed rail saw are two very interesting labor-saving devices located in this yard.

As stated above, this is a part of our organization which very few are acquainted with but nevertheless a visit to this yard will not only be interesting but will afford an opportunity to become acquainted with a loyal and efficient group of veterans.

Brother Tony Wells of Racine has been on the sick list for a week, and we are glad to see him back on the job again.

Brother D. W. Bowes has opened up his winter quarters at Oakdale, Miss., where he will inspect pine ties for our track construction work.

Brother Louis Geter is now in command of the night gang at the Public Service building.

Brother John Kasmey, one of our veteran curve cleaners, has returned to work after a few days' illness.

Brother John Francis is also on the sick list, and we hope to see him back at work soon.

Brother Frank Cook has been at Trinity Hospital for a week, where Dr. Lemon performed an operation on him for appendicitis. Brother Cook is back on the job again, feeling better than ever.

Dr. Lemon has by means of an X-ray located a piece of steel in Brother Fred Bruks's arm which has been imbedded there since August. The steel has been removed, much to Brother Bruks's relief.

Brother and Mrs. Charles F. Lederer wish to express their sincere thanks and appreciation for the services rendered by Drs. Lemon, Miller and Sullivan in the operation performed upon their daughter.

Brother George Dunn of the Waukesha division has issued a number of emergency orders for a special brand of shotgun shells. These orders have been filled with great haste. The parties devoting their noon hours filling these orders have written invitations for a rabbit pie dinner, but are holding them for information from Brother Dunn as to when the rabbits will arrive.

Brother Pat Reilly has been wearing an exceptionally bright smile for the

past week, and in conversation with him it was revealed that the cause of this smile was the new pneumatic tie tamping machine being tried out on his job. Brother Reilly is expecting to see the time when he will walk to the job in the morning and start all the operations by turning on a few switches and pressing a few buttons.

Brother E. M. Brown is lying awake nights thinking how he can take the kinks out of the State street bridge. He gets down every morning, lines up the track on both sides of the bridge, and is called back to the job every time the bridge turns round. The trouble being that the bridge is worn and becomes out of line every time it makes a complete revolution. We are wondering how Mr. Brown voted on the last bond issue.

The electric shovel at the Waukesha gravel pit after giving long and faithful service picked a very inopportune time for its complete breakdown, there being a great demand for gravel for paving material and dry sand for the cars. A serious shortage in gravel was averted by the prompt action of Brother O. E. Flint, who was notified of the breakdown at 9:00 A. M. on October 23. A steam shovel engineer was hired, the steam shovel at Big Bend pit was fired up and the boom swinging when the whistles blew at 12:30 on the same day. The shovel from the Waukesha gravel pit is now at Cold Spring Shops and is receiving a complete overhauling.



J. Hipp after a few days' illness is again on the job.

On November 19 the 18th birthday of Albert Ganditz turned up.

The first of the new boilers for Oneida street arrived November 23.

A. David has been graduated from Commerce street to Public Service power plant.

We are pleased to report Charles Mack's rapid recovery from an appendicitis operation.

Mr. and Mrs. Henry Miller announce the arrival of a baby boy. The father is doing nicely.

(Overheard in a street car): "Gee, I'd like to go to the fair grounds and see Oldy Barnfield race."

When Hughes lost, some of the Commerce street boys also lost—some hats. Peter G. had an especially long face.

George Bodden left the service to take an outdoor job as truck driver. Not much of a judge with winter coming on.

South Siders enjoyed seeing a nice new bicycle rolling around their boulevards. It was ridden by Walter Doelner.

Commerce street has a new fleet footed Mercury in the person of E. Becker, as Albert has been advanced to clerk.

Village note: Our former townsman, Phil Korst, drove into the city awhile back. We suspicion he's spakin', by heck.

One day last week a man called for certain information for which it was necessary to direct him to the Sales Department. We told him to ask for Mr. Coffin or Mr. Hersh. The man said, "What's the difference?"

Thomas D. Witherspoon has joined the power plant force as superintendent of construction. He comes to us after ten years' service with our sister company, the Union Electric of St. Louis, where he served as chief draftsman. We take much pleasure in extending a warm welcome to Mr. Witherspoon and assure him that the Milwaukee bunch will heartily co-operate in every way to make his work with us a pleasure as well as a success. Mr. Witherspoon graduated from Rose Polytechnic in 1900 and his experience covers a

5/1917

WAV AND SINGLES

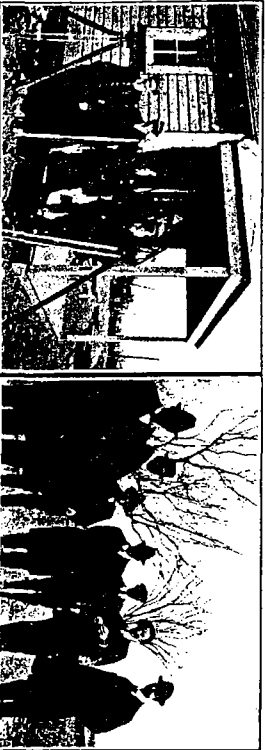
ENGINEERING

"Oh bother the flowers that bloom in the spring, 'Twa la,
For they have nothing to do with the thing, 'Twa la."

Dear Friends:—We apologize for the poetical inclination, but nevertheless we have started our Great Spring drive long before the pristine appearance of the Flora referred to above. Strategic movements had already been planned during the long winter's retreat and allied with "Old Sol," who drove the solidly entrenched enemy from the ground, our forces were brought up and the gigantic battle of the year is now on.

Our boys are actively engaged at the various fronts. On the long south front, in the Town of Lake, south of St. Francis and between Kinnickinnic avenue and Lake Michigan, the spring drive is well under way. Here Brothers Dentz, Smith, Halsey, Brantmeier and with their youngest recruit, Davidson, have established permanent field headquarters from where the work of the new power plant, Coal Storage Yards and other work is directed.

One of the oldest land marks of the Company, viz: Kinnickinnic Yard, is now being converted into a coal storage plant, the old buildings are being dismantled, the yard cleaned up, and the laying of tracks, and the construction of the coal hopper has already been commenced. The driving of the piles and setting of foundations for the coal hopper is under the supervision of Brother Kuechemmeister.



Some of our Engineers in the field

Brothers Buckley, Miller, Mancel and Anderson are now engaged in general work about the city and on the entire system. Making a survey of the Racine gas works coal storage yard, giving line and grade on city track jobs, staking out the various buildings now under construction, including the laying out of tracks for the K. K. yard, additional work at Oakland station, track elevation work, etc., is all in a day's work for Brother Buckley and his party.

Brother Brown is again back in trim and resumes his duties of track inspection.

Amidst the refreshing breezes of the lake, Brother Mereness is still on inspection work in connection with construction of an addition to the Racine power plant.

Brother Bennett, who has long been closed in on office work in connection with the Real Estate Valuation, is gleefully anticipating the resumption of his outdoor activities on inspection work.

Brother Archambault retired to his bungalow home in East Milwaukee for several days nursing a very bad cold.

We remember having read two lines and incidentally experienced the feeling when "In spring a young man's fancy lightly turns to thoughts of love," etc., which seems to be the sad case of Brother Mancel, for his actions have betrayed him: inasmuch that upon arriving at the office these spring mornings he

RAIL AND WIRE

inquires about certain mail he seems to expect from his "sister." Voluntary epistles have frequently awaited him, but when he misses one of the daily messages he becomes downcast and disheartened. Such a "sisterly" devotion is surely to be admired. In one of the mails our Brother was pleasantly surprised with what appeared to be a huge box of sweets, which he enjoyed in the privacy of his own rooms without letting in any of the boys on the front.

If we are still alive further light on this subject will appear in future issues of "Rail & Wire."

One way of meeting the high cost of living is being extensively practiced by Brothers Kuechemmeister and Stenlopf, who are heavily investing their surplus shekels in the purchase of eggs and storing them with anticipations of eating them during the winter months, when this particular staple sells at a prohibitive price.

Some people collect old stamps, raise chickens or mount butterflies, but our Brother Hibbard's latest hobby is designing curves for the Kinnickinnic yard coal storage plant.

The other day we received two brand new leveling rods, which were placed temporarily aside our stonographer's desk. The desire to learn something new every minute brought the guest from the young lady whether these were tripods or transits, much to the amusement of the boys within hearing distance.

Yours, as ever,
THEO. D. LITTE

The Building force at present numbers about 55 men.

The new Fond du Lac Club rooms will be dedicated with similar ceremonies on May 17.

You won't need to go to Europe to fight, come down in the carpenter shop some noon.

Ignatz Kalinowski purchased a Victrola and he says, "My goodness, that fine music."

The Building boys are busy getting new Sales offices on the third floor ready for occupancy.

The Building boys are pretty white as well as a sweet bunch lately. They bought—flour and sugar.

Miss Steckling's suitor works night, so he comes to see her during working hours. How about it, Helen?

When Brother Joe Arana wants to get things moved in a hurry he says, "We'll get the Artillery Department."

Brother Birchler can say with the rest of 'em, "Jump in, I'm going that way, it won't take but a few minutes."

Brother Geo. Stoneman's oldest daughter, Gertrude, is getting along nicely after a four week siege of typhoid fever.

The Building men erected a 66 foot flagpole at Fond du Lac Station, and it was not long before Brother Wallace had Old Glory floating to the breeze.

There must be something very peculiar in the village of Rochester on the interurban line that attracts Brother Bolzendahl's attention on Saturdays and Sundays. We all think the W. & S. Eng. Division will soon be making a little charivari. Come on, Ed, let us know about it.

Peace is most to be desired.
It comes so easily—
To get it have your houses wired
For Electricity.

The easiest work on earth is someone else's. The hardest your own.

RAW 8/17

POWER PLANTS

Our Kinnickinnic coal yard is coming along in good shape. The War department began clearing the site April 1 and the first car of coal was unloaded June 25. We loaded our coal barge for the first time on July 9. The yard is designed to store 46,000 tons and to deliver 1,500 tons per day to the barge. A detailed description of the yard will be published later.

Otto Mack spent his vacation at Hunter Lake and returned with cast-iron evidence of having landed a pickarel 37 inches long and 7 inches wide.

Louie Orlovitz to John Baumann of the Accounting: "Say, John, where do you make application for a Green Book? I'm sick of wearing a badge."

Henry Dornbrook went back to the farm for his vacation and when he got back he said he could still smell the new-mown hay.

The first 1917 meeting of the Power Plant Water Raits was called to order in Lake Pewaukee the afternoon of the first picnic day. Those present were: Mr. and Mrs. Warhanek, Mr. and Mrs. Boyer, Miss Doubrawa, Bill Schubert, and Bill Protzmann.

Frank Leach took a trip through the East during his vacation, visiting Detroit, Buffalo, and New York. He went through the Waterside Station while in New York and when in Buffalo made the trolley trip around Niagara, just a few hours after one of the cubs had plunged into the river.

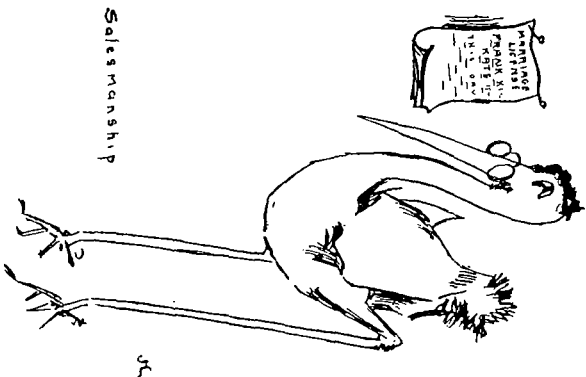
Construction work on the new Racine boiler room is making rapid progress. We expect to have the first two 810-horsepower boilers under steam by the end of the month.

Gust Hoppe has received a letter from his son, announcing his safe arrival in France as a member of the Marine Corps.

APPRECIATION AND THANKS

It is impossible to express in words our appreciation and thanks for the beautiful wedding gifts received from the Power Plant and other departments. In the \$100.00 Liberty Bond we realize that it was given not only with the thought of the present but also for the welfare of our future, and we thank you all very kindly.

Sincerely,
MR. AND MRS. F. J. KOMAREK.



Salesmanship

ALL IN THE STATE OF MIND

If you think you're beaten you are,
If you think you date not you don't,
If you're like to win, but you think you can't,
It's almost a cinch you won't.

If you think you'll lose, you've lost,
For out in the world we find
Success begins with a fellow's will.
It's all in the state of mind.

Full many a race is lost,
Where a step is lost,
Where a coward fails,
Where his work's begun.

Think BIG and your deeds will grow,
Think SMALL and you'll fall behind.
It's all in the state of mind.

If you think you're outclassed, you are,
If you've got to think high to rise,
You've got to be sure of yourself before
You ever can win a prize.

Life's battles don't always go
To the stronger or faster man,
But soon or late the man who thinks
Is the fellow who THINKS HE CAN.

NOTICE

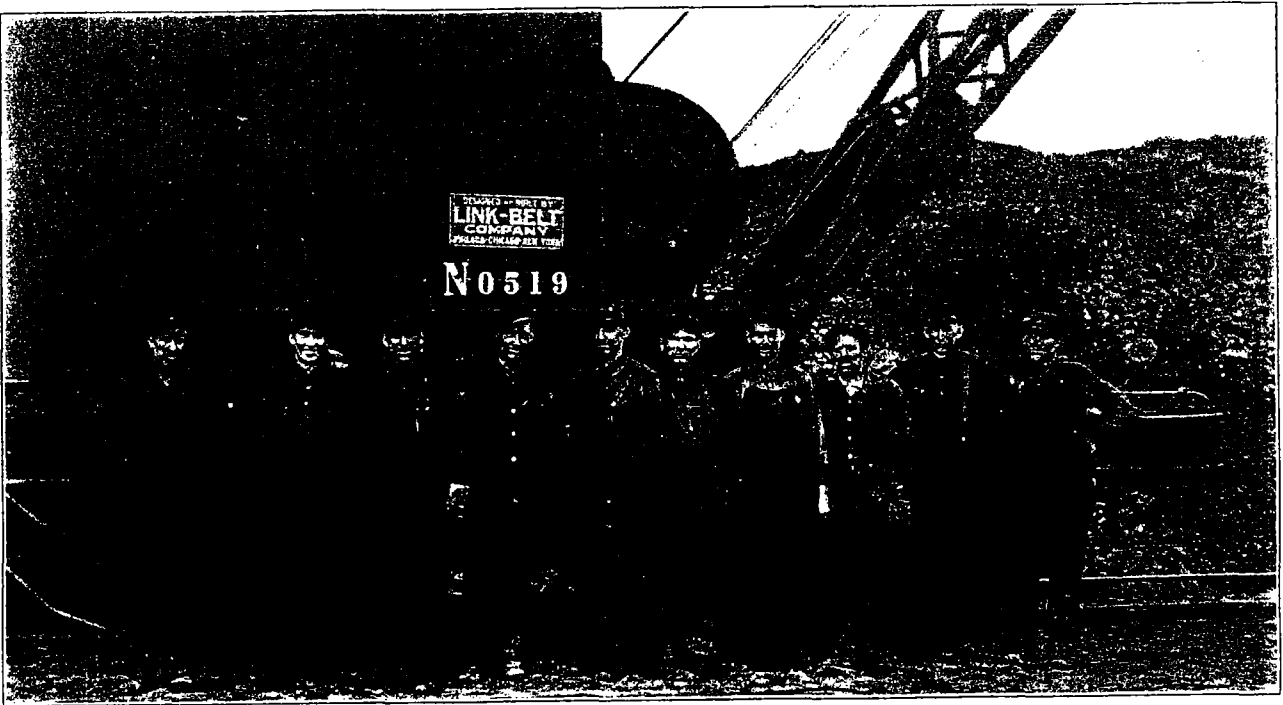
In order to advance the patriotic work of food conservation the Women's Auxiliary will hold a monster conservation rally in the Auditorium of the Public Service Building, on August 7th, at 4:30 P. M.

All wives, sisters and mother of employees are invited, as well as all women interested in the proper preparation and conservation of food. Addresses will be made by Miss Freda C. Niese, director of the Electate Cooking Classes, and others.

The talks will be plain and practical, worded so all may understand.

COME

and bring your friends



COAL HANDLING CREW AT KINNICKINNIC YARD

In order—C. Pearson, Belt Tender. Oscar Larson, Clerk. Frank Kubiak, Crane Eng. Tom Burns, Oiler. Ernest Lewis, Main Man. Joe Savatovech, Laborer. Wm. Curtton, Crane Operator. Geo. Williams, Night Foreman. Gus. Hanson, Crane Operator. E. Sutton, Foreman.

RAIL AND WIRE

VOL. V. NOVEMBER 1917

PROUD OF OUR PART

Uncle Sam's second Liberty Loan is a triumphant success and we Company family are proud of the part we took in making it such. Just of this Company took a total of \$63,050 in the bonds, 1,027 individuals.

The Company as a corporation bought \$100,000 worth of the 1 Desiring to take part in the campaign, on October 5 a meeting was to discuss ways and means of helping the government in its task of money and it was the consensus of opinion that if the proper information conveyed to the employees of the Company their response would be heart patriotic. A plan was formed to call on every man in the service and to him the need of the government and the advantage of his owning a

Then 125 men were picked for the work of approaching the men, then becoming our salesmen and participating in the bond salesmen's part on the afternoon of October 10 and, through the efforts of Mr. Am addressed by the Rev. C. H. Beale, who gave an interesting and patriotic address, saying in part:

War is the supreme activity of a nation. It does not engage in war until it is threatened with invasion, the rights of its citizens abridged and that imperturbed, its institutions and its ideals endangered. When a nation does war all its resources should be placed at the disposal of the government.

When congress declared that a state of war existed between this country and imperial German government measures were taken by which the services of million young men were secured for the nation through volunteering and the draft. These men have offered their time, their strength, their talents and their commerce, transportation and finance and within a short time the greatest pool of brains ever placed at the disposal of a government was freely offered to the executive.

An appeal was made to the laborers and with the exception of a few groups, an advantage of the crisis to advance their own interests, the workers of the country a mobilized army to speed up construction of every kind.

A call was made for funds to finance the war and the response was so just so enthusiastic that a first Liberty Loan and an enormous Red Cross fund were subscribed.

Now comes a call for a second Liberty Loan. All the citizens of this country asked to back up the boys at the front and in the training camps by supplying the necessary for their equipment and support. The bonds are so distributed as to be the reach of all. The possession of these bonds at this time is a patriotic. The moral effect of having this loan subscribed quickly will shorten the war and saving precious lives. Nothing will help more in our friends and disheartening our foes than such evidence of the unity and devotion of our people.

But the government is not calling for a gift. It is an investment which of the best of security and the surest return. He who buys a Liberty Bond has a which can be converted into cash at any time and which promises a higher rate of than the savings bank. It is seldom that we are offered a chance to work a patriotic and make a fine profit besides. The conditions are so easy that by a little saving of what would be otherwise spent on trifles any one can become the possessor of what will enrich himself and his family, while at the same time he a patriotic service to his country and helping along the cause of freedom, and humanity.

Through the efforts of the bond salesmen practically every employee approached and given an opportunity of considering the purchase of arrangements having been made by which they could finance their part on easy terms. The result was that when the campaign closed a total of \$63,050 had been subscribed—a voluntary offering by our fellow workers to their country. For although these bonds are the best investments to procure, it was patriotism that brought most of our people to lend financial support to their government, few of them thinking of the earnings on an investment of this character. The participation of in the work of assisting the Wisconsin Liberty Loan committee was voluntary and reflects to a fine degree the Americanism spirit of the Company family.

NOVEMBER 1917

96

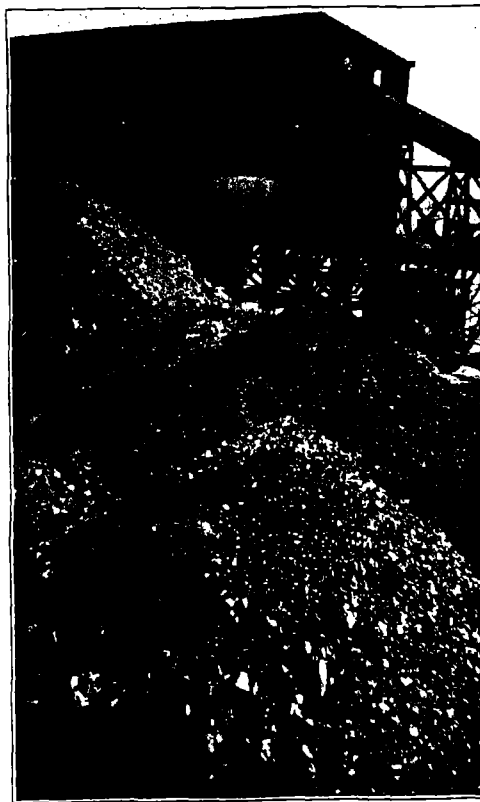
RAIL AND WIRE

tunity to see the construction work. All admired the modern improvements that are under way.

Messrs. Enders, Bugbee and Rave were most obliging guides, answering the numberless questions the feminine members of the party asked; a well-known characteristic of that sex.

The ride to and from Racine afforded much pleasure as all were in a lively mood, and laughter prevailed throughout the entire trip.

SAW THE NEW COAL YARD



A part of the Coal Pile

On October 1st the Misses Jennings, Fitzsimmons, Trimborn, and Doubrava, in company with Messrs. Witherspoon and Schubert, inspected the K. K. coal yard. For the past few months the coal topic has been the foremost in the Power Plant Department, in fact it aroused the interest of the girls to such an extent that they decided to visit the coal yard and see just how coal was being received and stored. After viewing the coal piles in general and observing the electric crane unloading coal from a car, the hopper conveyors and crusher were thoroughly explained. The girls were then taken into the coal bunker from where the coal is conveyed to the Barge "Transfer" for transportation to the Power Plants. One item of great interest was that of the electric signaling device for the conveying machinery, which by pressing a button will turn on a light in the conveyor house, thereby notifying the operator to start the machinery. The operation of the clam shell bucket was also demonstrated. Last of all, but not least, the girls were given a ride on the steam locomotive, which was enjoyed very much.

HEATING MADE IT HOT

With great gusto, the Power Plant league opened its annual bowling season on October 3. The teams appear to be evenly balanced and a tight race for the bunting is anticipated. To date the Heating team is steaming along in good shape, but the Operators intend to begin operations shortly, while George Boyer has started the construction of a good team in his office. The Laboratory team must convince the boys that they can stand the acid test, before they will be considered title contenders. Harry Kringel, who is leading the league for individual average, attributes his success to his good delivery. Comes natural to him. His father was an expressman. Henry Warhanek, the Heating demon, is second in individual averages, despite the fact that he rolls

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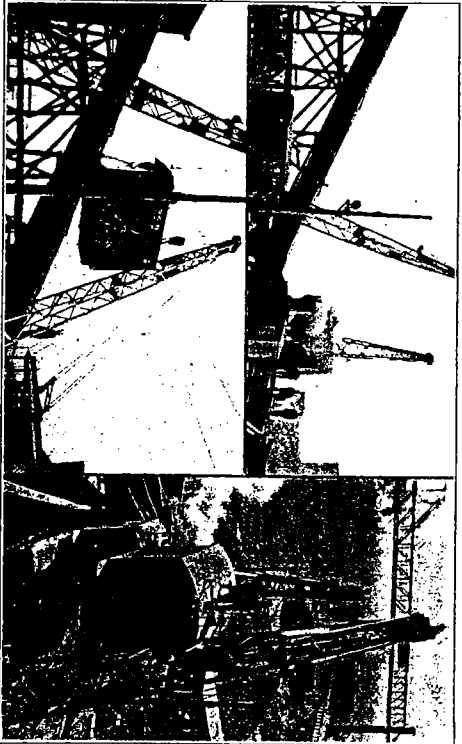
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5/19/18

POWER PLANTS



The accompanying pictures depict the dismantling of the Browning crane at K. K. coal yard by two link-belt cranes, preparatory to taking the trestle upon which it rested to Racine, where it is now installed on the unloading dock. The work of taking down the cab and truck, which were of 20 and 25 ton weight respectively, covered five hours. The Browning crane has again been assembled and is now in use at the K. K. yard unloading cars.

A MAN

When war broke out between Spain and the United States, it was very necessary to communicate quickly with the leader of the Insurgents. Garcia was somewhere in the mountain fastnesses of Cuba—no one knew where. No mail or telegraph message could reach him. The President must secure his co-operation, and quickly. What to do! Some one said to the President, "There is a fellow by the name of Rowan who will find Garcia for you, if anybody can." Rowan was sent for and given a letter to be delivered to Garcia. How the "fellow by the name of Rowan" took the letter, sealed it up in an oilskin pouch, strapped it over his heart, in four days landed by night off the coast of Cuba from an open boat, disappeared into the jungle, and in three weeks came out on the other side of the island, having traversed a hostile country on foot, and delivered his letter to Garcia—are things I have no special desire now to tell in detail. The point that I wish to make is this: McKinley gave Rowan a letter to be delivered to Garcia; Rowan took the letter and did not ask, "Where is he at?"

There are a good many "Rowans" in the Power Plant department. Without them there would never be the smooth operating condition that exists with us today. We have a few, however, as with all large bodies of men, who when given the man's job of work wants to spend as much time in asking questions about it as it takes the "Rowan" to do it. General Garcia is dead, but there are other Garcias to carry messages to and you are given them every day but perhaps do not recognize them. Those that do and carry the message direct are finding that it is getting to be their turn to send messages.

We want to speak a word of encouragement for the man that succeeds

RAIL AND WIRE

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against great odds in directing the efforts of others with no other aim than the elevation of his own self-respect. I also want to stand back of the man who does his work when the boss is away as well as when he is around, and the man who when given a letter for Garcia quietly takes it without asking any idiotic questions or raising any objections just for the sake of doing so, and who with no lurking intention of dropping it into the nearest sewer, or of doing aught else but deliver it to the man who never gets laid off nor has to ask twice for higher wages. Civilization is one long anxious search for just such men. Anything such a man wants he gets. There is opportunity after opportunity in the Power Plants for such men. He is needed and needed badly—the man who can carry the "Message to Garcia."

Don Pierce is on the market for a self-commencer for his machine, having become tired of hand cranking.

Otto Ehnke is now assistant captain of the "Transfer," succeeding A. Eliason, leaving to sail the Great Lakes.

Joseph Kimmel, employed as locomotive engineer at the K. K. coal yard, has come to join Tom Jerry on the Power Plant department's buffet.

Oscar Wahlton is also the proud father of a baby girl. Will daylight never come? Is there no saviour in this department to save us from the epidemic of girls?

In answer to question as to how much he weighed, an applicant for work at Commerce street laconically replied, "Oh, pretty much." On death, where is thy sting?

A twelve pound baby girl was born to Mr. and Mrs. Frank Konarek on Wednesday, April 17. Frank anticipated a little engineer, but is very well satisfied even with a stenographer. Mother and child are doing nicely.

Otto Vogt to photographer: "How much are your pictures?" Photographer: "\$4.00 per dozen."

Otto Vogt: "Well, I'll come back next year. I've got only eleven now." Philip B. Korst, formerly employed as assistant engineer in the Power Plant office, was married on Wednesday, April 10, at Janesville, Wis., to Miss Jessie Prunor. Genial Phil's former comrades extend their best wishes as the good ship "Korst" slides gently into the matrimonial sea.

It has been conclusively proven that advertising in "Rail and Wire" pays. On the strength of the ad inserted in one of our previous issues, Fred Dornbrook has disposed of his powerful Overland and is now sporting a "Com-voyance" car, occasionally alluded to as a "Michigan Mercedes."

Ole Hanson, the original "Ancient Mariner" of the Great Lakes, brought the newly purchased barges "Butman" and "Carpenter" down from Sturgeon Bay. He reports a rather exciting trip, being laid up several days at Kewanee and Sheboygan, due to high winds. The barges were in tow of the Gillen tug.

Explanation of Light Economy—Although turning down the gas saves matches, it very often makes matches. Turning off an electric light often causes sparking. Turning off a gas light causes an increase of pressure. An increase of pressure causes a lessening of the waist (waste). A lessening of the waist (waste) adds to the pleasure of those in arms.

Frank Miller, the Heating expert, took notice of one of the signs around the department asking him to vote right and for America. Frank says he looked high and low on the ballot for America, but couldn't find it, so he didn't vote at all. He says he doesn't even know for which office America ran.

John Windhauser, in charge of the Wauwatosa Pumping Station, was viewing the passing of a funeral procession and, turning to a bystander, suddenly said: "I'd give \$500 to know the place where I am going to die." "Why?" asked the astonished bystander. "Why," replied John, "I'd never go near it."

Henry Warhanek, on phone: "Operator, please switch."

OK on phone

per month. This was back in the old days when a dollar was nearly big enough to buy a square meal. B. C. B. worked his way through several minor positions such as trackman, civil engineer, etc., and finally qualified for the Power Plant department, working in the chief engineer's office, then located in the place Bruce-Wahlen & Co. now operate their meter department. Ben has been around this place for nearly 21 years and is getting to know it fairly well. Outside of his work, it is as an athlete that he shines. Track events, swimming, bowling and baseball are his meat, although he is just a trifle slower at this stuff than when he first stepped out. By the way, the last time we saw him play ball was last summer when the Power Plant All-Stars clouted the old apple over his bald onion out in center field for at least six homers. Ben dances, smokes cigarettes, and all in all is quite devilish. Guess that's all we know about him.

FAREWELL TO K. K. COAL YARD

This month marked the veritable closing of the K. K. coal yard and with it the disbanding of the renowned Coal Yard Crew. The gang which Ed. Sutton collected about him was probably the greatest aggregation of unique and assorted characters ever herded inside of four walls. It was Ed's proud boast that each and every one was captured fifty miles from land or sea.

No more will Rail and Wire readers read tales of the doings of the comedians of the Coal Yard and it is with regret that we see the troupe disbanded. Places have been provided for them, however, in the various plants.

Steve Drichta, formerly at K. K., is now foreman of Edison street shop. Admiral Larson is also employed there. Marshal Williams has joined the troupe of performers of the barge "Collier." The Marshal had tears in his eyes when he left the coal yard.

Society Note—Jack Owens was seen ambling along the main street wearing a new Panama.

Archibald Stevenson had an enjoyable time at the wedding of his daughter. Archie says it was by no means a dry affair.

Oak Henning is also "some berries" this trip. Oak, in the course of his duties as "sanitary engineer," was obliged to visit the home of one of the Company employes and to the young lady answering the bell he announced that her father had asked him to come up. Oak was presently informed that the lady was the gentleman's wife.

Society Note—Jack Skoniery, Frank Gallion, Henry Ehmke, and Frank Komarek attended a bevo party at Muskego Lake.

Talk about your sunkissed babies, we'll say that Lake Beulah sun sure burned up the Misses Kunzman, Trimborn and Murphy.

Miss Othilia Arndorfer has been added to the office force, replacing Miss Norma Hatch, who left to take charge of Bill Protzman's financial affairs.

A. Puffer has joined our "Names is Names" club and was put to work on the "Lorena." Pepper is back at Racine and will henceforth make things hot at that place.

Have you noticed the floral additions to the Power Plant offices? Some vegetation, we'll tell the world. At this stage of the race, Room 320 is running a good fourth to the three other rooms.

Walter Doehler, in company with fellow members of a singing society, recently toured to Lake Geneva for an outing. The roads were dusty and the day was hot and their throats were parched—well, you know.

Christ Zich rested up at Merriwell Lake and discovered a new way to snare fish. Christ goes after them early morning or late at night, finds them sleeping and when they wake up and yawn he drops the hooks into their mouths.

On May 29, Miss Norma Hatch and Wm. J. Protzman were united in marriage at the home of the groom's parents. The department was not represented when the knot was tied, but the gang appeared later, a dozen strong,

Power Plant Department

WHO'S WHO

In making the selection for this column, we scanned the long list of employees and finally decided that Gust Thom ought to qualify, not knowing at the time that he has had a real battle in life.

Paterson, N. J., was his birthplace on September 3, 1888. He grew up like all children enjoying the usual events of childhood and their school. When only eight years old and just completing the fourth grade, he met the saddest reverse anyone could, that of losing his father and mother within a year. Four children were left orphans and were sent to the Snake Hill Orphan Asylum in New Jersey and later to the Milwaukee Orphans' Home. At the age of nine Gust was adopted by some charitable people at Markesan, Wis. Here he helped on the farm which work he followed until 1908.

Milwaukee beckoned him and gave him a new point of view, and here he worked in a commission house sorting oranges. He then worked for the T. L. Smith Co. as a key seating machine operator for a year, only to return to the farm. The big city had given him greater hopes, however, so he returned to Milwaukee and worked for the Milwaukee Motor Works as a magneto assembler for two and a half years.

June 5, 1913 was the date of his entry in this Company, working as a turbine operator at Commerce St. P. P. Five years later, the Oneida St. Plant was developing the pulverized coal idea which got Gust interested and he was transferred to that plant as mill operator and later to maintenance man in charge of this equipment.

Feeling that he had adapted himself to pulverized coal equipment, and as Lakeside P. P. was just being completed, he was transferred there on June 9, 1920, as mill operator. On June 6, 1922 he was promoted to operating and maintenance man in which capacity he is assistant mill room foreman in charge of a shift, his present position. Gust knows this part of a power plant very well, having grown up with it and spent the last eleven years with it.

The education that he has has all been acquired through the educational opportunities offered E. M. B. A. for self improvement.

So much for that part of his life. He, of course, believed in settling down so when Miss Louise Bierbaum thought the



Gus Thom.

same they were married, on November 6, 1913 while he was working at Commerce St. He has two children, Marion 4, and Monroe 12. Three years after his marriage, he purchased a home through E. M. S. B. & L. A.

He enjoys his pipe and during the winter, takes in as many E. M. B. A. dances as he can.

We are proud to have the name of Gust Thom added to the roster of Who's Who and admire him for the pluck he has shown in his battle against the trials of life.

WELCOME NEW POWER PLANT E. M. B. A. MEMBERS

The department extends the hand of welcome and greeting to the following new members. We are glad to have them as a part of our organizations. They have all been initiated by the Power Chapter Officers.

Anton Tadych	Fred Wagner	John Roe
Alb. Poluczak	Frank Preschern	Mike Muzia
Henry Belk	Helmer Hempton	Earl Hogan
Joe Pizzino	Frank Forman	Roy Biehn
Henry LaPointe	Ken. McAteer	Joe Urban

PASSING OF K. K. COAL YARD

It was just twelve years and four months, from the day K. K. Coal Yard came into existence to the day it ceased to be a live section of the Power Plant department. Progress of time relegated this once very active division to just a memory.

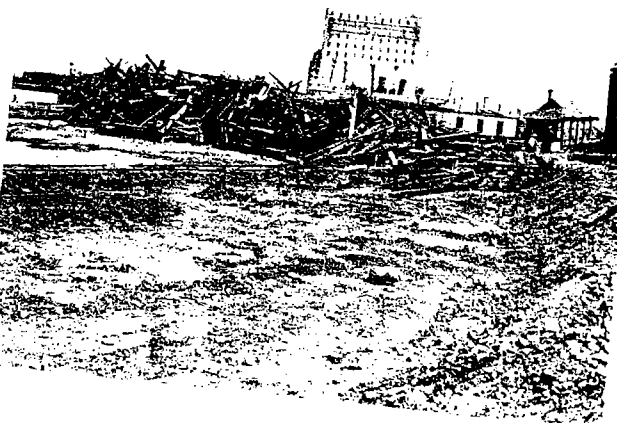
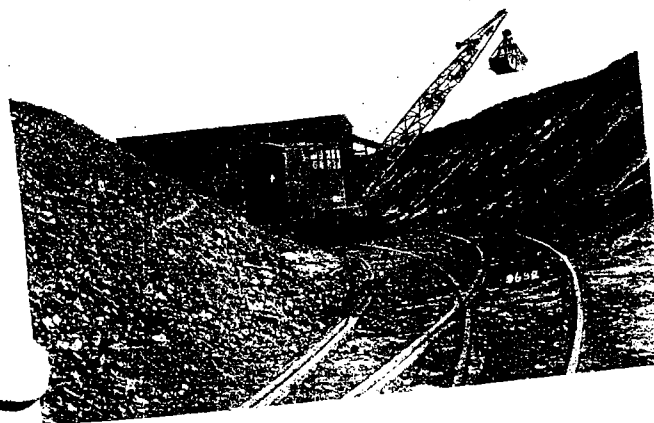
We cannot let this occasion pass without giving a history of this yard by way of eulogy. The site was first cleared on April 1, 1917 and from then on the yard was rushed to completion, and in June the first car of coal entered the yard. The Barge Transfer took out the first load of coal for Commerce St. P. P. on July 9 of the same year.

Thousands of tons of coal were hauled through this yard, the month of June 1917 showing 308 tons. In August 1918 the peak was reached, 66,000 tons.

Coal from this yard was delivered by barges to the Commerce St. and East Wells plants and to Lakeside P. P. via utility service. The process of getting coal to Lakeside was from local dealers' yards via our barges, onto the belt conveyor up to the hopper from which utility cars were loaded and hauled to Lakeside.

Hopper bottom cars were unloaded over the track hopper and conveyed to the storage hopper with a capacity of 1,500 tons, from which the coal was carried down chutes by gravity. Other types were cars unloaded by steam or electric locomotive cars onto the conveyor belt or into the storage yard.

The yard was closed in July, 1919, and coal in storage



THE PASSING OF KINNICKINNIC COAL YARD

Left, the yard in its heyday, the hopper in the background. Right, the last chapter, the remains of the hopper.

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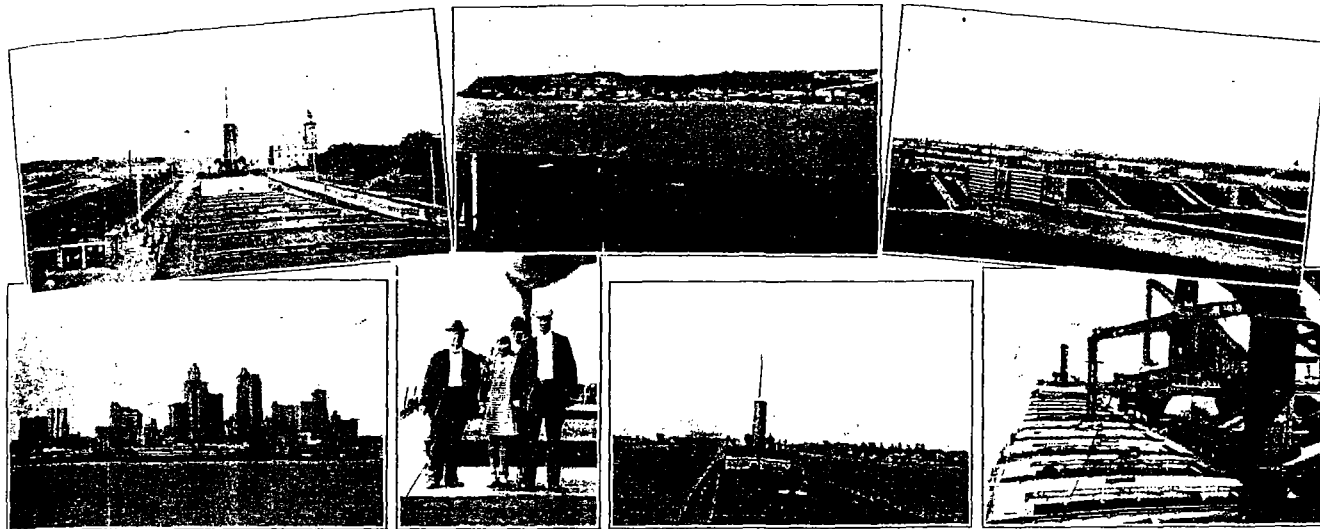
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CRUISING THE LAKES WITH THE EVANS FAMILY

Above, left, locked in the Soo, going up into Superior; center, Muckinac Island; right, the Soo Locks. Below, skyline of Detroit as seen aboard ship in Detroit River; Lyness Evans and family, and E. J. "Pop" Evans; Livingstone Channel, lower Detroit River; unloading iron ore at Ashtabula, Ohio.

loaded for car stations and the balance this year was delivered to Lakeside.

The hopper and machinery have been removed and the famous K. K. Coal Yard is now just a memory.

Of the original crew at this yard who helped make its history the following are still in divisions of this department and other departments of the Company: Oscar Larson, Geo. Williams, Steve Drichta, F. McKenna, Wm. Swanell, Wm. Curtin, Dan Lawler, Teddy Kearns, Alb. Schmidt, P. Vugrich, and John Timm.

POWER PLANT EMPLOYEES, KNOW YOUR E. M. B. A.

By F. J. Komarek

ADDITIONAL SICKNESS AND ACCIDENT INSURANCE

If someone told you that it is possible to get protection twenty-four hours a day when sick and when disability exists due to an accident off or on duty, you no doubt would say, "Fine, where can I get such insurance?"

Your Association sells this class of insurance to its members at the actual cost of carrying. Obviously the rates are reasonable.

A few years ago, the Insurance Committee of E. M. B. A. made a study of all occupations and changed the risks which make the policies more suited to our line of work.

This type of insurance is known as Plan No. 5 and pays disability benefits after five days in addition to workmen's compensation when injury occurs on duty. Benefits are paid for twelve consecutive months. You can take out sickness and accident insurance up to 80% of your monthly earnings (including bonus). Benefits are paid every two weeks.

When employment ceases with the Company, all sickness and accident insurance policies terminate.

This policy does not pay on account of death due to natural causes. Death benefit is paid only in cases of accidental death off or on duty.

Rates are determined by the class of work you are engaged in.

All E. M. B. A. policies and rates are approved and governed by the State Insurance Commission.

Several Power Plant employees are on the sick list that could have carried this kind of insurance but put it off. Don't be one of those who waits.

See your labor adjustment committeeman, director, foreman or Frank Komarek.

Today is the time, tomorrow may be too late.

A HEATING SYSTEM

At this time of the year most of us are busy looking after the heating systems in our homes, preparing for the winter demand. The Heating system of our Company is along the lines of our own only on a much larger scale.

Steam for heating and cooking purposes in the Milwaukee business and East Side residence area is furnished from three plants, namely Commerce St., East Wells, and Stephenson.

In the Spring when the season is over, the East Wells plant is shut down, leaving the other two to take care of the high pressure steam load. Hundreds of condensation meters are brought in from the customers' premises, tested, repaired and connected up. The steam generating plants are overhauled and necessary repairs made.

After the first of September, the weather charts are watched very carefully and at the first signs of a drop in temperature, arrangements are made to turn on steam.

Boilers are fired up and steam gradually and carefully admitted into the mains, located in tunnels and streets. Men are stationed at various points opening valves and draining the system of any water. This process is taken step by step and requires many hours and a crew of efficient employees.

A gradual pressure is built up until it meets the requirements of the customers. Crews are organized at the various plants and all is in readiness for the maximum demand of sub-zero weather.

During the course of the next six months, millions of pounds of coal will be consumed to keep the people of Milwaukee warm and comfortable.

POWER PLANT OCCUPATIONS

GENERAL HELPERS

This is the nineteenth of a series of articles dealing with the many occupations in and around a power plant. Having covered practically all the occupations in a steam plant, we have left before us helpers of an unclassified nature. One might say they are the apprentices in a plant.

Their presence is necessary and they are called upon to do work of every description, such as cleaning equipment, changing oil filter bags, operating condenser traveling screens, cleaning intake pond, relieving operators of such rank as motormen, condenser washers, janitors, ashmen, boilerwashers, etc.

With the varied experience and training they receive, they in a short time are able to qualify for positions of greater responsibility, acquiring the necessary knowledge from the engineers and senior operators.

Special educational courses are arranged for power plant

THE MILWAUKEE COKE & GAS COMPANY

GAS DELIVERED TO MILWAUKEE GAS LIGHT COMPANY

<u>YEAR</u>	<u>M.C.F.</u>	<u>AMOUNT</u>
1917	2714354	137,246.98
1918	2864880	163,192.87
1919	2915775	249,111.00
1920	2673535	267,353.50
1921	2101892	210,189.20
1922	3563572	391,621.20
1923	4890828	580,694.33
1924	4030340	427,374.80
1925	4664243	530,250.54
1926	5188544	648,221.44
1927	5297558	676,565.08
1/1 to 6/30/28	2088765	229,319.86
7/1 to 12/31/28	1874456	187,445.60
1929	5598316	810,289.80
1930	6341477	968,043.10
1931	5345347	690,296.34

2-U-779
Approved
by PSC

MILWAUKEE COKE & GAS CO.

and

MILWAUKEE GAS LIGHT CO.

CONTRACT FOR THE SALE AND PURCHASE OF CRUDE COKE OVEN GAS

August 21, 1934

Agreement made this 21st day of August, 1934 by and between THE MILWAUKEE COKE & GAS CO. hereafter called "COKE COMPANY" and MILWAUKEE GAS LIGHT CO. hereafter called "GAS COMPANY" both corporations organized and existing under and by virtue of the laws of the State of Wisconsin.

The parties hereto mutually and reciprocally undertake and agree as follows: That COKE COMPANY will sell and deliver coke oven gas to GAS COMPANY and GAS COMPANY will purchase, receive and accept such gas from COKE COMPANY in accordance with the following terms and conditions.

1. TERM. This agreement shall be in force and effect from September 1, 1934 until September 1, 1939 and thereafter unless and until terminated by either party as of September 1, 1939 or as of September 1st in any subsequent year, by giving to the other party written notice eighteen (18) months prior to date of expiration of this contract.
2. QUANTITY. COKE COMPANY agrees to supply the GAS

COMPANY and the GAS COMPANY agrees to purchase daily from the COKE COMPANY not less than thirteen million (13,000,000) cubic feet of gas of the quality and in accordance with terms stipulated in this contract.

Any additional gas that COKE COMPANY may produce daily during the term of this contract, COKE COMPANY must offer to GAS COMPANY for purchase, before disposing of such gas in other ways, and GAS COMPANY has the option of purchasing all or a portion of such gas for its operations, in accordance with the terms of this contract and of the quality stipulated.

3. DELIVERY AND PRESSURE. The gas so required to be supplied shall be delivered to the GAS COMPANY's pumping mains on Greenfield Ave. at the pressure necessary to force it through these two sixteen (16) inch mains or any others which may in the future be added and through the GAS COMPANY's purifying apparatus and into its holders located at its Third Ward Works. The pressure required for the above purposes however shall not exceed six (6) pounds above the atmosphere.
4. QUALITY. The COKE COMPANY shall supply gas washed and scrubbed and with a total sulphur content of not to exceed three hundred and twenty (320) grains per one hundred (100) cubic feet of which not more than twenty (20) grains shall be organic sulphur. This gas

shall at no time show a naphthalene content of over three (3) grains per one hundred (100) cubic feet and the COKE COMPANY shall make every effort to keep the naphthalene content at the smallest quantity reasonably possible. Tests of quality to be made at the inlet of the GAS COMPANY's purifiers for total sulphur and naphthalene and at the outlet of GAS COMPANY's purifiers for organic sulphur.

5. HEAT CONTENT. Gas supplied under this agreement shall have an average monthly heating value of not less than five hundred and twenty five (525) B.t.u. per cubic foot and the heating value at any time shall not be more than five percent (5%) above or four percent (4%) below this standard. Determination of heating value shall be made with approved calorimeters at the outlet of the GAS COMPANY's purifiers.

6. MEASUREMENTS.

a. The gas covered by this agreement shall be measured by approved meters furnished by the GAS COMPANY at the outlet of GAS COMPANY'S purifiers. These meters shall be kept in good order by the GAS COMPANY and all gas measurements as shown by the meters shall be corrected to sixty (60) degrees Fahrenheit and five (5) inches of water pressure above the atmosphere according to a certain table, copy of which is hereto attached and made a part of this agreement.

COKE OVEN GAS CONTRACT

AGREEMENT, made and entered into as of the 22nd day of August, 1950, by and between MILWAUKEE GAS LIGHT COMPANY, hereinafter referred to as "Buyer", and MILWAUKEE SOLVAY COKE COMPANY, hereinafter referred to as "Seller", both Wisconsin corporations.

BUYER'S REPRESENTATIONS

Buyer is a public utility operating under the laws of Wisconsin and is engaged in the distribution and sale of gas for light, heat and power to the public generally in the City of Milwaukee and in various cities, villages and townships of the metropolitan area of Milwaukee. Buyer normally distributes natural gas which is delivered to it by means of pipe lines.

Buyer has entered into a contract, hereinafter referred to as the "Sewerage Commission Gas Contract", with the Sewerage Commission of the City of Milwaukee, hereinafter referred to as the "Sewerage Commission", for the sale by Buyer to the Sewerage Commission of gas in a quantity sufficient to furnish the heat requirements for the operation of the Sewage Disposal Plant of the Sewerage Commission up to a maximum of 70,000 therms per day. Buyer desires to purchase from Seller a minimum of approximately 60,000 therms per day and up to a maximum of 67,600 therms of surplus coke oven gas a day for resale to the Sewerage Commission.

In the event the supply of natural gas to Buyer is at any time inadequate to meet the full gas requirements of Buyer because of a breakage, accident or failure of a pipe line system supplying natural gas to Buyer or of Buyer's system, Buyer desires to have Seller upon request make quickly available for use by Buyer, in meeting the requirements of its customers, up to 110,000 therms of coke oven gas a day.

SELLER'S REPRESENTATIONS

Seller is engaged in the manufacture and sale of coke, coke oven gas, and coal chemicals, and owns facilities capable of manufacturing a maximum of approximately 110,000 therms of coke oven gas a day with a heat value of approximately 520 B.t.u.'s per cubic foot.

In its normal operations hereafter Seller expects to produce beyond its own requirements a minimum of approximately 60,000 therms and not more than approximately 67,600 therms of surplus coke oven gas a day. Seller will maintain the equivalent of its present gas manufacturing equipment, including its producer plant and the liquefied petroleum gas underfiring facilities, in good operating condition so that it can deliver to Buyer upon request up to a total of approximately 110,000 therms of coke oven gas a day.

Seller desires to obtain a market for the surplus coke oven gas produced by it in excess of its own requirements in the normal operations of its plant.

CONSIDERATION

In consideration of the sum of One Dollar by each to the other in hand paid, receipt whereof is hereby acknowledged, and of the mutual covenants of the parties hereinafter set forth,

it is agreed by and between the parties hereto as follows:

ARTICLE I

TERMINATION OF EXISTING AGREEMENT

1. The existing agreement between the parties hereto, dated August 21, 1934, as amended by the agreement dated May 6, 1937, and the letter agreement dated January 29, 1943, as amended by the agreement dated April 5, 1943, shall be terminated and superseded by this agreement at the time this agreement becomes effective as provided in Section I of Article III hereof. Any and all provisions relating to termination contained in the aforesaid agreements which are inconsistent with the foregoing are hereby cancelled and superseded by the provisions of this Section.

2. Within 90 days after the termination of said agreements, as provided in Section 1, Seller shall be reimbursed by Buyer for the balance of Seller's investment in facilities for the production and use of substitute fuels in the manner and to the extent provided in paragraph 7 of said letter agreement of January 29, 1943, as amended April 5, 1943.

ARTICLE II

TERM OF AGREEMENT

1. Subject to Sections 1 and 2 of Article III hereof, this agreement shall be and remain in force and effect until September 2, 1960 and thereafter unless and until terminated by either party by giving to the other party at least 18 months' prior written notice thereof. If either party shall desire to terminate this agreement at the expiration of the 10-year term.

it shall give written notice thereof to the other party at least 18 months prior to the expiration of the term. This agreement may be terminated at any time upon mutual written consent of Buyer and Seller.

ARTICLE III

INITIAL DELIVERY DATE, APPROVALS AND TERMINATIONS

1. Buyer shall make prompt application to the Public Service Commission of Wisconsin for approval of this contract pursuant to Section 196.52 of the Wisconsin Statutes, and this agreement shall become effective at 7 o'clock A. M. on the twenty-first day after the date the Public Service Commission of Wisconsin shall have approved the same in writing; provided, however, that if this agreement is approved, but with conditions which are unacceptable to either party, such party may cancel this agreement by written notice delivered to the other before the agreement shall have become effective as aforesaid.

2. In the event the Sewerage Commission Gas Contract is terminated by either party thereto for any reason whatsoever, Buyer may terminate this agreement by 6 months' written notice to Seller, and in such event all liability of either party to the other under this agreement shall also terminate, except as to liabilities accruing prior to the termination of this agreement.

ARTICLE IV

SALE OF GAS, QUALITY AND VARIATIONS IN HEATING VALUE

1. To enable Buyer to fulfill its obligations under the Sewerage Commission Gas Contract, Seller shall sell and de-

. liver to Buyer and Buyer shall purchase and receive such amounts of surplus coke oven gas (as defined in Section 1 of Article XI) as Seller shall make available to Buyer; provided, however, that Buyer shall not be obligated to purchase more than 67,600 therms of surplus coke oven gas in any one day. If the amount of available surplus coke oven gas shall at any time be less than the quantity required to furnish the heat requirements of the Sewerage Commission under the Sewerage Commission Gas Contract, Seller shall deliver such additional quantities of coke oven gas as may be requested by Buyer for the purpose of furnishing said Sewerage Commission heat requirements; provided, however, that Seller shall not be obligated to deliver an aggregate of more than 60,000 therms per day for such purpose. Buyer may make such request orally or by telephone to the person who is at the time in charge of operations at Seller's plant.

2. Upon request of Buyer, in emergencies when Buyer's supply of natural gas is interrupted or curtailed due to any breakage, accident or failure of a pipe line system supplying natural gas to Buyer or of a Buyer's system, Seller shall sell and deliver to Buyer the quantity of coke oven gas requested by Buyer up to 110,000 therms a day, and Seller shall deliver at the requested rate as promptly as it is able to place in operation the additional facilities needed to deliver the quantity of coke oven gas so requested. Buyer may make such request orally or by telephone to the person who is at the time in charge of operations at Seller's plant.

3. Unless otherwise mutually agreed, the gas delivered hereunder shall be coke oven gas of the quality which on the date

Seller to Buyer and having an average hourly heating value of not less than 500 B.t.u.'s per cubic foot. The coke oven gas shall be washed and scrubbed and shall have a total sulphur content of not to exceed 320 grains for 100 cubic feet, of which not more than 20 grains shall be organic sulphur. The coke oven gas shall be so treated to maintain a naphthalene content below 5 grains for 100 cubic feet and Seller shall make every effort to keep the naphthalene content at the smallest quantity reasonably possible.

4. Except in case of emergency, Seller shall give Buyer 24 hours' notice of any substantial change in the B.t.u. value of the coke oven gas delivered hereunder.

ARTICLE V

EMERGENCY OPERATION; STANDBY FEE

1. Seller shall maintain in good condition for emergency operation at least the equivalent of the present gas manufacturing equipment, including the producer plant and the liquefied petroleum gas underfiring facilities, in order to assist Buyer in fulfilling Buyer's obligations as a public utility to supply gas to its customers. Seller shall use its best efforts to maintain on hand at all times sufficient supplies of coke, oil, coal and liquefied petroleum and to have available adequate personnel to produce and to deliver such quantities of coke oven gas as are requested by Buyer pursuant to Article IV.

2. Seller shall take all necessary measures to deliver to Buyer as promptly as possible such quantities of coke oven gas as are requested by Buyer pursuant to Article IV, including, if necessary, use of the petroleum gas underfiring facilities and/or operation of its producer plant.

3. As compensation for Seller's preparedness to serve and for maintaining all such standby gas production facilities, Buyer shall

pay Seller (a) \$63,000 annually for 60,000 therms of standby capacity to be obtained by diversion of capacity normally utilized for delivery of gas for the Sewerage Commission, and (b) \$37,000 for 50,000 therms of standby capacity available from the use of standby underfiring equipment of the Seller. The total payment of \$100,000 per year shall be made in equal monthly installments on the 25th day of each month, commencing on the 25th day of the first calendar month in which the effective date of this agreement falls.

ARTICLE VI

PRICE OF COKE OVEN GAS

1. The price to be paid for all coke oven gas delivered to Buyer for resale by Buyer under the Sewerage Commission Gas Contract, (which shall be deemed to be all coke oven gas delivered to Buyer hereunder, other than standby gas) shall be an amount per therm determined as follows:

(a) The price per therm shall be an amount equal to the average cost of coal per therm to Wisconsin Electric Power Company for the monthly accounting period of said Company ending with or in the calendar month in which the gas is delivered to the Sewerage Commission, as such cost is shown on the billings of said Company under its Industrial Primary Rate Schedule, or as reported for said month to the Public Service Commission of Wisconsin, computed in accordance with the present practice for determining such cost.

(b) If the data for the determination of the price of gas as specified in subsection (a) of this Section 1 shall not be available, the price per therm shall be an amount equal to the

average cost of coal per therm coked by Seller for the calendar month for which billing is made. The average B.t.u. value per ton shall be determined from the coal, as used, by taking a representative sample, in accordance with the present practice of Wisconsin Electric Power Company.

(c) The average cost of coal per therm shall be determined by dividing the average cost of coal per ton of 2,000 pounds by the average B.t.u. value per ton and multiplying the quotient by 100,000.

2. The price for all standby gas (as defined in Section 1 of Article XI) delivered to Buyer hereunder shall be five cents (5¢) per therm.

3. The price determined in accordance with the foregoing provisions of this Article VI shall be increased by an amount equal to any cost incurred by Seller by reason of the imposition on Seller of any tax or taxes on the production, transportation, sale or delivery of coke oven gas delivered to Buyer.

ARTICLE VII

PLACE OF DELIVERY; PRESSURE; STORAGE; TRANSMISSION FACILITIES; TITLE; POSSESSION AND RESPONSIBILITY

1. The coke oven gas shall be delivered by Seller to Buyer's coke oven gas transmission lines now connecting Seller's plant with Buyer's Third Ward Station. The place of delivery shall be at the point where the coke oven gas transmission lines cross Seller's north boundary line, which line is described as the north boundary line of Lot No. 2, Section 4, which is located

16 feet south of the center line of Greenfield Avenue and is that line measuring 183.46 feet from the Chicago and Northwestern Railroad right of way to a point 116 feet east of the west line of Section 4, Township 6 North, Range 22 East.

2. The coke oven gas shall be delivered by Seller to Buyer at a pressure not to exceed 9 pounds per square inch gauge pressure when delivering at the rate of 110,000 therms per day.

3. Buyer shall use its existing holder capacity to the extent possible to store the excess coke oven gas produced by Seller during any hour over coke oven gas consumed by the Sewerage Commission during such hour, and to fulfill requirements of the Sewerage Commission during any hour beyond Seller's production during such hour, and may use the transmission lines referred to in Section 1 of this Article VII in such a manner as to further these purposes.

4. Title to and possession of coke oven gas delivered hereunder shall pass to Buyer at the place of delivery provided for in Section 1 of this Article VII. Each party shall be solely responsible for, and shall indemnify the other party and save it harmless from, any and all damages or injuries, or liabilities therefor, caused by the coke oven gas in its possession or arising out of the maintenance or operation of its equipment, and not due to or contributed to by the act or omission of the other party.

ARTICLE VIII
MEASUREMENT OF GAS

1. Under normal conditions the total volume and the B.t.u. value of the coke oven gas which is delivered hereunder to Buyer shall be determined by the meter and recording calorimeter owned and maintained by Seller at its plant. In event the quantity of gas delivered hereunder shall at any time exceed the capacity of Seller's meter, such meter shall be by-passed during such period, and the volume shall be determined by using Buyer's measuring equipment located at its Third Ward Station and at the Sewage Disposal Plant.

2. The volume of standby gas used by Buyer hereunder shall be determined by meters owned and maintained by Buyer at its Third Ward Station.

3. Each party shall have the right of access to the measuring facilities installed upon the other's premises for purposes of reading, and shall also have the right of access to all records and charts pertaining thereto which are in the other's possession.

4. Observations of volume shall be made hourly from meters, and B.t.u. value shall be determined from the charts of the aforesaid recording calorimeter. Seller shall estimate the volume of coke oven gas delivered during each hour and shall make hourly telephone reports thereof to Buyer's dispatcher.

5. The volumes of gas delivered at flowing pressures and temperatures shall be corrected to standard cubic feet by the application of proper and mutually acceptable correction factors. The number of therms delivered in any day shall be determined by multiplying the volume of gas delivered in that day, corrected to standard cubic feet, by the B.t.u. value of coke oven gas delivered in that day, also corrected to standard cubic feet, and dividing the product by 100,000. Seller shall compute and report to Buyer each day the total number of therms delivered to Buyer during the preceding day.

6. Either party may at any time request a test of measuring equipment. When such request is made, Buyer shall cause the test to be made, and Seller shall have the right to be present during such tests. The party requesting the test shall pay the costs of the test.

7. If upon any test the measuring equipment is not found to be more than 2 percent in error, previous readings of such equipment shall be considered correct in computing the deliveries of gas hereunder. If upon any test the measuring equipment shall be found to be inaccurate by an amount exceeding 2 percent, then any previous readings of such equipment shall be corrected to zero error for any period which is known definitely or agreed upon, but if the period is not known definitely or agreed upon, such correction shall be for a period covering the last half of the time elapsed since the date of the last test, but not exceeding a period of 30 days

prior to the date when the meter was inaccurate as shown by the later test. Any measuring equipment found to be inaccurate shall be adjusted at once to record accurately.

8. If for any reason measuring equipment is out of service or out of repair so that the quantity of gas delivered is not correctly indicated by the reading thereof, the gas delivered through the period such equipment is out of service or out of repair shall be estimated and agreed upon on the basis of the best data available, using the first of the following methods which is feasible:

(a) by using the registration of any check meter or meters if installed and accurately registering;

(b) by correcting the error if the percentage of error is ascertainable by calibration, test or mathematical calculation; or

(c) by estimating the quantity of delivery by deliveries during preceding periods under similar conditions when the equipment was registering accurately.

ARTICLE IX

BILLING AND PAYMENT

1. On or before the tenth day of each calendar month, Seller shall furnish Buyer a statement showing the amount due to Seller for coke oven gas delivered hereunder to Buyer during the previous month. Such statement shall set forth separately the amount due to Seller:

(a) For all coke oven gas delivered by Seller to Buyer for resale by Buyer under the Sewerage Commission Gas Contract.

Such amount shall be determined by multiplying the total number of therms of said coke oven gas delivered during such month by the price per therm as determined for such month in accordance with Section 1 and 3 of Article VI. If data reflecting the average cost of coal per therm to Wisconsin Electric Power Company for such month is not then available, but it appears that it will be available within 10 days, the price per therm during the preceding month shall be used and a corrected statement shall be submitted when the average cost of coal per therm to Wisconsin Electric Power Company for that month becomes available. If such cost of coal to Wisconsin Electric Power Company does not become available within said period, the cost of coal per therm to the Seller as prescribed in Section 1 (b) of Article VI shall be used and a corrected statement based thereon shall be submitted.

(b) For all standby gas delivered by Seller to Buyer.

Such amount shall be determined by multiplying the total number of therms of standby gas delivered during such month by the price per therm as determined for such month in

accordance with Sections 2 and 3 of Article VI.

Such statement shall set forth the complete computation or basis of determination of the quantities, amounts or other data used in computing the statement. Each party shall have the right at all reasonable times to examine the books, records, and charts of the other party to the extent necessary to verify the accuracy of any statement, charge or computation made under or pursuant to any of the provisions of this agreement.

2. Buyer shall pay to Seller at Seller's office on or before the twentieth day of the calendar month the amount of said statement. In the event a corrected statement is submitted, additional payment by Buyer or refund by Seller, as the case may be, shall be made in accordance with the corrected statement within 10 days after delivery thereof. Should Buyer fail to make such payment when due, interest thereon shall accrue at the legal rate of interest from the due date until the day of payment. If such failure to pay shall continue for 60 days after payment is due, Seller may suspend further delivery of coke oven gas to Buyer until such amount is paid; provided, however, that if Buyer in good faith either shall dispute the amount of any such statement or parts thereof or present a counterclaim or offset against the same, and at any time thereafter, within 30 days after demand made by Seller, shall furnish a good and sufficient surety bond, in amounts and with sureties satisfactory to Seller or shall make deposit in escrow of amounts satisfactory to Seller, conditioned upon the payment

determination, which may be reached either by agreement, arbitration award or judgement of the courts, then such amount shall not be deemed to be due unless and until default be made in the conditions of such bond or escrow agreement. If Seller shall require Buyer to furnish a bond or deposit in escrow, Seller shall within one year thereafter institute appropriate proceedings to determine the dispute. None of the foregoing provisions shall operate to bar either Seller or Buyer from asserting any other remedy it may have at law or in equity. If presentation of a statement by Seller is delayed after the tenth of the month, then the time for payment shall be extended correspondingly.

ARTICLE X

FORCE MAJEURE

1. No failure or delay in performance of this agreement by either party hereto shall be deemed to be a breach of the same when such failure or delay is occasioned by or due to any act of God, strikes, lockouts, acts of the public enemy, wars, blockades, insurrections, riots, epidemics, landslides, lightning, earthquakes, fires, storms, floods, washouts, arrests and restraints of rulers and peoples, civil disturbances, explosions, sabotage, breakage or accidents or necessary major repairs to machinery, ovens or lines of pipe, inability to obtain materials or equipment, the binding order of any court or governmental authority which has been resisted in good faith by all reasonable legal means, or any other cause, whether of the kind herein enumerated or otherwise, not within the control of the party claiming

suspension and which by the exercise of due diligence it is unable to prevent or overcome.

2. Such causes or contingencies affecting performance by either party shall not relieve such party of liability in the event of its concurring negligence or in the event of its failure to use diligence to remedy the situation and remove the cause in an adequate manner and with all reasonable dispatch, nor shall such causes or contingencies relieve Buyer of its obligations to make payments of amounts then due hereunder. Either party, whose performance under this contract shall be affected or threatened to be affected adversely, shall give the other party as much notice thereof as circumstances will permit.

ARTICLE XI

MISCELLANEOUS

1. Definitions:

- (a) The term "day" means a period of 24 consecutive hours beginning at 6 o'clock in the morning, Central Standard Time.
- (b) The term "B.t.u." means British thermal unit.
- (c) The term "therm" means 100,000 B.t.u.'s.
- (d) The term "standard cubic foot" when used in reference to measurement of gas means a cubic foot of gas at an absolute pressure of 30 inches of mercury and at a temperature of 60 degrees Fahrenheit, saturated.
- (e) The term "coke oven gas", in addition to gas commonly known as coke oven gas, means such other gas or mixture of gases as are

delivered hereunder by Seller with Buyer's consent.

(f) The term "surplus coke oven gas" means coke oven gas which is produced by Seller, in excess of its own requirements, when its producer plant and the liquefied petroleum gas facilities are not in operation, when the ovens are being underfired with coke oven gas and when normal operating procedure is being followed.

(g) The term "standby gas" means coke oven gas delivered by Seller hereunder which is required and used by Buyer, for purposes other than resale to the Sewerage Commission, during periods of emergency when Buyer's supply of natural gas is interrupted or curtailed due to any breakage, accident or failure of a pipe line system supplying natural gas to Buyer or of Buyer's system.

2. Any notice, request, demand or statement provided for in this agreement, other than the telephone notice provided for in Article IV, shall be in writing and shall be deemed to be duly delivered when addressed to the party to receive the same, and mailed by registered mail, postage prepaid, or delivered by messenger, to the post office address of such party. The post office address of Buyer is hereby designated as 626 East Wisconsin Avenue, Milwaukee 1, Wisconsin. The post office address of Seller is hereby designated as 311 East Greenfield Avenue, Milwaukee 1,

Wisconsin. Either party may from time to time designate any other post office address by formal written notice to the other party. Routine communications (including monthly statements and payments) need not be registered.

3. No waiver by either party of any one or more defaults by the other in performance of any provision of this agreement shall operate or be construed as a waiver of any future default or defaults, whether of a like or of a different character.

4. This agreement shall be binding upon the parties hereto and their respective successors or assigns.

IN WITNESS WHEREOF, each of the parties hereto has caused its name to be hereunto subscribed by its President or Vice President thereunto duly authorized and its corporate seal to be affixed and attested by its Secretary or Assistant Secretary in duplicate on the date first above stated.

(Corporate Seal)

MILWAUKEE GAS LIGHT COMPANY

Attest: /s/ P. J. Imse

By /s/ Glenn R. Chamberlain
President

(Corporate Seal)

MILWAUKEE SOLVAY COKE COMPANY

Attest: /s/ P. J. Kortsch

By /s/ Louis G. Kreuz
President

COKE OVEN GAS CONTRACT

AGREEMENT dated August 22, 1950, by and between MILWAUKEE GAS LIGHT COMPANY
and MILWAUKEE SOLVAY COKE COMPANY.

Approximately 73 mimeographed copies run off.
Copies distributed as follows:

Signed copies

1 to Public Service Commission of Wisconsin - 8/22/50
1 " Paul Barnes (Miller, Mack & Fairchild) - "
1 " Louis G. Kreuz (Pres. Milwaukee Solvay Coke Co.) - 8/22/50
1 " Mr. Glenn R. Chamberlain (for Mr. Woolfolk) - "
1 in Secretary's Contract Files

Conformed Copies

3 conformed copies to Public Service Comm. of Wis. - 8/22/50
1 " copy to Mr. Glenn R. Chamberlain (for Mr. Fink)
1 " " " Mr. Glenn R. Chamberlain
1 " " " Mr. D. B. W. Brown
4 " copies to Mr. Shaw (Sidley, Austin, Burgess & Smith - Washington, D.C.)
1 " copy in "Natural Gas File - Milw. Solvay Coke Co.) Secy's. Office
1 " " " File No. 2-U-3202 - Secy's. Office (P.S.C. file)
1 " " to F. Hathaway (Arth. Andersen & Co.) - 8/24
3 " copies to Mr. L. Kreuz (Milw. Solvay Coke Co.) - 8/25
1 " copy to Mr. F. W. Sharp - 8/25
1 " " " Mr. W. G. Woolfolk "
1 " " " Mr. S. S. Faville "
1 " " " Mr. W. F. Douthirt "
1 " " " Mr. P. J. Imse
1 " " " E. C. Brenner - 8/29
1 " " " B. T. Franck - "
1 " " " T. C. Bolliger (Miller, Mack & Fairchild) - 8/31
1 " " " F. Sammond - 8/31
1 " " " R. T. McElvenny - 8/31
1 " " " J. Bolender - 9/1
1 " " " E. Campbell - "
1 " " " J. Wright - "
1 " " " Bob Brown - "
1 " " " E. Burzlaff - "
1 " " " E. Frank - 9/7
1 " " " M. Andersen - "
1 " " " F. Lipsky - "
1 " " " C. Dornbach - "
12 " copies - Directors & Minutes



PUBLIC SERVICE COMMISSION OF WISCONSIN

STATE OFFICE BUILDING
MADISON 2, WISCONSIN

JOHN C. DOERFER, CHAIRMAN
W. F. WHITNEY, COMMISSIONER
SAMUEL BRYAN, COMMISSIONER
EDWARD T. KAVENY, SECRETARY

August 25, 1950

FILE NO. 2-U-3202 OPD

NOTED
AUG 28 1950

D. B. W. F.

RECEIVED BY G. R. C.

AUG 28 1950

REFERRED TO
ANSWERED

Mr. Glenn R. Chamberlain, President
Milwaukee Gas Light Company
626 East Wisconsin Avenue
Milwaukee 1, Wisconsin

Dear Sir:

This will acknowledge your letter of August 22 with the attached copy of a contract between the Milwaukee Gas Light Company and the Milwaukee Solvay Coke Company.

The contracts will be reviewed by the Commission and you will be informed soon whether they are acceptable for filing.

Very truly yours,

Edward T. Kaveny
Secretary

MILWAUKEE GAS LIGHT COMPANY

626 EAST WISCONSIN AVENUE

MILWAUKEE 1, WISCONSIN

GLENN R. CHAMBERLAIN
PRESIDENT

August 22, 1950

TELEPHONE
DALY 8-6720

Public Service Commission of Wisconsin
State Office Building
One West Wilson Street
Madison 2, Wisconsin

Gentlemen:

We submit herewith for written approval by the Commission pursuant to Section 196.52 of the Wisconsin Statutes a verified copy of a Coke Oven Gas Contract dated August 22, 1950, between Milwaukee Gas Light Company and its wholly owned subsidiary Milwaukee Solvay Coke Company.

It is believed that this contract conforms in all respects with the Commission's Order dated May 26, 1950, in File No. 2-U-3202, and the Commission is respectfully requested to give its written approval thereof without further hearing.


You will note that this contract deals only with delivery of coke oven gas (a) for resale to the Sewerage Commission and (b) for use by Milwaukee Gas Light Company in event of interruption of its natural gas supply due to pipeline system failures. In view of recent developments in the international situation the parties recognize the possibility that during the 10-year term of this agreement war or other political or economic conditions may lead to the supply of natural gas to Milwaukee Gas Light Company becoming inadequate and making it impossible for pipeline systems to expand to meet market demands. In such event coke oven gas may be required by the Gas Company to supplement its natural gas sendout over a more or less extended period of time. Since this situation was not presented or discussed in the previous hearings and is not believed to be imminent at this time, it is not covered by the enclosed contract but is left to be dealt with if and when it arises in the light of then existing circumstances.

Three extra copies of the contract and of this letter are enclosed for your convenience.

Enclosures

Very truly yours,
MILWAUKEE GAS LIGHT COMPANY

By


Glenn R. Chamberlain,
President

COKE OVEN GAS CONTRACT

Application of Milwaukee Gas Light Company
for approval of Contract between said
Company and Milwaukee Solvay Coke Company - 2-U-3202

Supplemental Opinion and Order

Dated August 31, 1950

Copies distributed as follows:

Glenn R. Chamberlain	-	9/1	
Dudley B. W. Brown	-	"	
E. C. Brenner	-	"	
B. T. Franck	-	"	
P. J. Imse	-	"	
J. Bolender	-	"	
E. Campbell	-	"	
J. Wright	-	"	
Bob Brown	-	"	
W. G. Woolfolk	-	9/6	
H. Fink	-	"	
R. T. McElvenny	-	"	
F. W. Sharp	-	"	
S. S. Faville	-	"	
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F. Sammond	-	"	
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E. Frank	-	"	
M. Andersen	-	"	
F. Lipsky	-	"	
C. Dornbach	-	"	
"Natural Gas File"	-	1 copy	
P.S.C. File - 2-U-3202-	-	1 copy	
Directors and Minutes	-	12 copies	
Mr. Fritz - Arch. Anderson etc.	-	1 copy	9/28/51
Hein Kloten	-	2/13/52	
R. D. Rossen	-	6/9/52	

C O P Y

PUBLIC SERVICE COMMISSION OF WISCONSIN

State Office Building

Madison 2, Wisconsin

File No. 2-U-3202

August 31, 1950

Milwaukee Gas Light Co., Mr. Glenn R. Chamberlain, Pres., 626
E. Wisconsin Ave., Milwaukee 2, Wis.
Miller, Mack & Fairchild, Attys., Mr. Frederic Sammond, 735 N.
Water St., Milwaukee 2, Wis.
Rieser & Mathys, Attys., Mr. Robert Rieser, 1 W. Main St.,
Madison 3, Wis.
Mr. Walter J. Mattison, City Atty., City Hall, Milwaukee, Wis.
Mr. Allen J. Busby, Atty., 710 N. Plankinton Ave., Milwaukee 3,
Wisconsin
Mr. C. R. Dineen, Atty., 341 Empire Building, Milwaukee 3, Wis.
Mr. F. A. Glojek, Atty., 7525 W. Greenfield Ave., Milwaukee
14, Wisconsin
Padway, Goldberg & Previant, Attys., Mr. Alfred G. Goldberg,
212 W. Wisconsin Ave., Milwaukee 3, Wis.
Mr. Milton F. Burmaster, City Atty., City Hall, Wauwatosa 13,
Wisconsin
Wisconsin Gas & Electric Co., Mr. R. W. Leach, Racine, Wis.
Mr. A. D. Telfer, City Manager, City Hall, Beloit, Wisconsin

Application of Milwaukee Gas Light
Company for Approval of Contract
Between Said Company and Its Wholly
Owned Subsidiary Milwaukee Solvay
Coke Company

Gentlemen:

We enclose certified copy of Supplemental Opinion and
Order issued in the above-entitled matter.

Very truly yours,

/s/ Edward T. Kaveny

Secretary

sg

C O P Y

BEFORE THE

PUBLIC SERVICE COMMISSION OF WISCONSIN

Application of Milwaukee Gas Light)
Company for Approval of Contract)
Between Said Company and Its Wholly) 2-U-3202
Owned Subsidiary Milwaukee Solvay)
Coke Company)

SUPPLEMENTAL OPINION AND ORDER

TO ALL TO WHOM THESE PRESENTS SHALL COME:

I, Edward T. Kaveny, Secretary of the Public Service Commission of Wisconsin, do hereby certify that I have compared the annexed copy of the decision with the original decision of the Public Service Commission of Wisconsin in the above-entitled matter, now on file in the office of said Commission, and that the same is a true copy of such original decision and of the whole thereof.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of said Commission at its office in the City of Madison, this 31st day of August, A. D. 1950

/s/ Edward T. Kaveny

Secretary

PUBLIC SERVICE COMMISSION OF WISCONSIN

BEFORE THE
PUBLIC SERVICE COMMISSION OF WISCONSIN

Application of Milwaukee Gas Light)	
Company for Approval of Contract)	
Between Said Company and Its Wholly)	2-U-3202
Owned Subsidiary Milwaukee Solvay)	
Coke Company)	

SUPPLEMENTAL OPINION AND ORDER

Under date of May 26, 1950 the Commission issued an opinion and order in the above docket disapproving the proposed charges for stand-by service contained in a certain contract bearing date of May 12, 1949 between the applicant and its subsidiary Milwaukee Solvay Coke Company. The contract provided for annual costs totaling about \$299,000 for 110,000 therms of daily stand-by service. In its May 26, 1950 order, the Commission found that reasonable annual charges for the stand-by service to be provided by the Coke Company would be as follows:

- (a) \$63,000 for 60,000 therms of stand-by capacity to be obtained by diversion of capacity available for delivery of gas for the Milwaukee Sewerage Commission.
- (b) \$37,000 for 50,000 therms of stand-by capacity available from the use of stand-by underfiring equipment of the Coke Company.
- (c) 5¢ per therm for any gas actually required and delivered by Milwaukee Solvay Coke Company to Milwaukee Gas Light Company for stand-by purposes.

On August 22, 1950 the applicant submitted a revised contract with the Solvay Coke Company bearing date of August 22, 1950 and providing for compensation for stand-by service in accordance with the findings in the May 26, 1950 order set forth above. Since the compensation provided for in the revised contract dated August 22, 1950 conforms with the findings of the Commission in its May 26, 1950 order the new contract will be approved.

Findings of Fact

THE COMMISSION FINDS:

That the contract between Milwaukee Gas Light Company and Milwaukee Solvay Coke Company dated as of August 22, 1950 which was filed with the Commission on August 23, 1950 is reasonable and consistent with the public interest.

Conclusion of Law

THE COMMISSION CONCLUDES:

That an order should be entered approving the aforesaid contract.

Order

IT IS THEREFORE ORDERED:

That the contract between Milwaukee Gas Light Company and Milwaukee Solvay Coke Company bearing date of August 22, 1950 be and the same is hereby approved subject to the reserved power of the Commission to revise and amend the terms and conditions thereof, if when and as necessary to protect and promote the public interest.

Dated at Madison, Wisconsin, this 31st day
of August, 1950.

PUBLIC SERVICE COMMISSION OF WISCONSIN

John C. Doerfer

Commissioner

W. F. Whitney

Commissioner

Samuel Bryan

Commissioner

too late to be effective since it was not filed within 20 days required by Statute.

We carefully considered the record at the time of entering our original decision and order and deemed that the same fully supported our order herein. The additional evidence offered by the petitioners for rehearing does not appear to be such as would materially add to the substance of the record or to justify a change in our conclusion.

After due consideration of the matters contained in the petition, we are of the opinion that no good purpose would be served by reopening the proceeding with respect to the rule in question.

ORDER

IT IS THEREFORE ORDERED:

That the aforesaid application for rehearing or reopening with respect to Rule 46B(1)(b) herein be and hereby is denied.

[2-U-3202—May 26, 1950]

Application of Milwaukee Gas Light Company for Approval of Contract Between Said Company and Its Wholly Owned Subsidiary Milwaukee Solvay Coke Company

PROCEEDING herein involves an application of Milwaukee Gas Light Company for approval of a contract with Milwaukee Solvay Coke Company, a wholly owned subsidiary providing for the furnishing by the coke company of certain stand-by service to the applicant.

The Commission, upon investigation, finding that the contract is not reasonable and consistent with the public interest, insofar as it relates to charges for stand-by service, disapproved it, except insofar as the contract relates to the price to be paid for surplus coke-oven gas. Order was entered accordingly.

OPINION AND ORDER

On November 8, 1949, the applicant filed with the Commission, a request for approval of a certain contract with Milwaukee Solvay Coke Company, bearing date of May 12, 1949, under section 196.52 known as the affiliated interest.

statute which contract provides for certain stand-by service to be furnished by said Milwaukee Solvay Coke Company to applicant.

Notice of investigation and hearing and assessment of costs was issued November 17, 1949.

Consolidated hearings were held in this docket and docket CA-2290 in Madison on December 8 and 9, 1949, and January 24 and 25, 1950, before examiner Alvin H. Olson, and Commissioners John C. Doerfer, W. F. Whitney, and Samuel Bryan.

APPEARANCES

Milwaukee Gas Light Company by Miller, Mack & Fairchild by Frederic Sammond, Steven E. Keane, and Paul M. Barnes, Milwaukee.

Madison Gas & Electric Company by Rieser and Mathys, attorneys, by Robert Rieser, and William McNamara, Madison.

City of Milwaukee by John J. Dolan, assistant city attorney.

Village of West Milwaukee by Allen J. Busby, attorney, Milwaukee.

Town of Milwaukee by C. R. Dineen, attorney, and Niel J. Gleason, attorney, Milwaukee.

City of West Allis by F. A. Glojek, acting city attorney.

Wisconsin State Federation of Labor; Milwaukee Federated Trades Council; Electrical Workers Union, Local 494; Associated Coke Plant Workers; Truck Drivers Joint Council No. 50; International Association of Machinists, Lodge 10; and Firemen and Oilers Union, Local 125 by Padway, Goldberg and Previant by Alfred G. Goldberg, Milwaukee.

City of Wauwatosa by Herbert L. Mounty, city attorney.

Wisconsin Gas and Electric Company by R. W. Leach, Racine.

City of Beloit by A. D. Telfer, city manager.

Of the Commission Staff

W. E. Torkelson, chief counsel; G. P. Steinmetz, chief engineer; J. A. Brady, engineering department; A. R. Colbert, chief, division of accounts and finance; and H. J. O'Leary, chief, rates and research department.

Briefs were filed by Miller, Mack and Fairchild on behalf of the applicant; and a joint brief was filed by the intervenors, city of Milwaukee, city of West Allis, city of Wauwatosa, town of Milwaukee and village of West Milwaukee.

OPINION

The issue in this proceeding, as stated in section 196.52 (3) is whether the contract is reasonable and consistent with the public interest.

Prior to the conversion to natural gas, in the latter part of 1949, the applicant had purchased a substantial amount of its manufactured-gas requirements from Milwaukee Solvay Coke Company. The latter company is a wholly owned subsidiary of the applicant.

The plant of the Milwaukee Solvay Coke Company is engaged primarily in the production of coke for domestic and industrial use. It consists of a battery or Koppers ovens and a battery of Solvay ovens. Normally about 2,050 tons of coal are coked daily. The coking of this amount of coal produces valuable by-products such as gas, and various other coal-tar products. For the year 1949, the revenues of the Coke Company totaled \$10,135,379 and were derived as follows:

	Revenue	Percent of total
Coke and breeze -----	\$ 7,591,179	74.90
Gas -----	1,692,536	16.70
Tar -----	412,873	4.07
Ammonical liquor -----	135,307	1.33
Benzol and other by-products -----	303,484	3.00
Total -----	\$10,135,379	100.00

The production of coke, alone, accounted for almost 75 percent of total revenues in 1949; and coke, together with gas, accounted for more than 91 percent of total revenues.

The Solvay ovens may be underfired with gas produced from the coking of coal, or may be underfired with a mixture of producer gas and liquefied-petroleum gas. The Koppers ovens likewise may be underfired with coke-oven gas, or with straight producer gas. Under normal operation, in the future, both batteries of ovens will be underfired with coke-oven gas, and the net surplus of coke-oven gas amounting to about 60,000 therms daily will be sold to the applicant.

MILW. GAS LIGHT CO.—CONTRACT WITH AFFILIATE 401

for resale to the Milwaukee Sewerage Commission. This amount can be diverted for applicant's use for stand-by purposes without interfering with the operations of the Coke Company. However, if the applicant desires an additional 50,000 therms of gas daily for stand-by, it is necessary for the Coke Company to utilize its stand-by underfiring equipment, consisting of a producer-gas plant and a liquefied-petroleum plant to increase the output of coke-oven gas from 60,000 therms to 110,000 therms daily.

The conversion of the applicant's system, to the delivery of straight natural gas, eliminated the necessity for obtaining a continuous supply of gas from the Coke Company. As a result, the parties entered into a new agreement for stand-by service, bearing date as of May 12, 1949; which contract is the subject matter of this proceeding. The essential features of the new contract as summarized, follow:

1. The Coke Company agrees to deliver to the applicant surplus coke-oven gas up to approximately 60,000 therms per day, to enable applicant to furnish the Milwaukee Sewerage Commission with surplus coke-oven gas, pursuant to a certain agreement between them.
2. In the event of interruption in the supply of natural gas, the Coke Company agrees to deliver, as promptly as possible, up to 110,000 therms daily to the applicant.
3. The Coke Company agrees to make 12 test runs of approximately 32-hours duration each annually of its stand-by producer-gas plant and liquefied-petroleum-gas underfiring facilities. The applicant agrees to receive the gas produced by test-run operations, up to approximately 60,000 therms per test run. The Coke Company agrees to maintain the producer-gas plant and liquefied-petroleum-gas underfiring facilities in good condition for immediate operation.
4. The applicant agrees to reimburse the Coke Company as follows:
 - (A) Stand-by charge of \$218,280 per year, payable in equal monthly installments.
 - (B) Payment of Coke Company's actual cost for maintaining and attending all stand-by production facilities, including costs of periodic-test operations.
 - (C) Payment for surplus coke-oven gas (delivered by applicant to Milwaukee Sewerage Commission)—price per therm shall equal the average cost of coal per therm to Wisconsin Electric Power Company as reflected under said company's Industrial Primary Rate Schedule.
 - (D) Coke-oven gas other than surplus and test-run-operation gas—actual cost to Coke Company.
 - (E) The foregoing prices are subject to increase by the amount of any taxes imposed on the Coke Company on the production, transportation, sale, or delivery of coke-oven gas to the applicant.

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5. The Coke Company agrees to deliver the gas subject to the contract to the applicant's gas transmission mains at the north boundary line of the Coke Company's property.
6. Term of agreement—10 years, with termination upon the tenth anniversary or thereafter upon 18 months prior written notice.

The total estimated annual charge to the applicant for the gas and stand-by service to be furnished by the Coke Company under this contract appears from the record to total \$298,765, made up as follows:

Stand-by capital charges	
Producer plant	\$79,784
Petroleum underfiring plant	4,586
Auxiliary equipment	7,850
Total	\$ 91,720
Payment of 3¢ per Mc.f. for surplus coke-oven gas in excess of estimated purchase price of 17¢ based on coal costs	126,540
Subtotal (per contract)	\$218,260
Stand-by costs of maintaining and attending production facilities	
Producer plant	\$38,887
Petroleum underfiring plant	8,274
Auxiliary equipment	1,861
Total	\$ 49,022
Cost of trial-run gas	\$ 31,483
Total	\$298,765

The cost to the applicant will be reduced from this amount by \$13,268 represented by revenue received from the Sewerage Commission for trial-run gas sold. Thus the net cost of the Coke Company stand-by to the applicant will approximate \$285,497 annually. According to the testimony, the rate of 3 cents per Mc.f. for surplus coke-oven gas is to be paid to the Coke Company as a stand-by charge even though the rate is in no way related to the actual cost to the Coke Company of furnishing stand-by service.

There is considerable testimony as to the proposed capital and operating costs of providing the stand-by underfiring equipment. If no other quantitative standard were available, the Commission would be constrained to disallow substantial portions of the proposed costs on the basis that such expenses were improvident and not reasonably necessary. The applicant has failed to meet the burden of proof, required under section 196.52, necessary to establish that

proposed arrangement is reasonable and consistent with the public interest. However, in this instance, there is available another standard by which the reasonableness of the proposed contract may be tested, namely, the cost of alternative methods of providing equivalent amounts of stand-by service.

Evidence, based upon laboratory tests, indicates that liquefied-petroleum gas will produce a stand-by service of satisfactory quality when consideration is given to the limited frequency and duration of use; and that such gas is at least as satisfactory for stand-by purposes as the mixture containing coke-oven gas proposed to be used by the applicant for stand-by service.

Both the applicant and the Commission staff introduced evidence as to the cost of providing liquefied-petroleum plants with equivalent stand-by capacity of 110,000 therms daily. These investment and annual costs are summarized below:

	Capital cost		Annual cost	
	Total	Per therm of daily capacity*	Total	Per therm of daily capacity*
Applicant	\$1,100,000	\$10.00	\$248,925	\$2.24
Commission staff	510,680	4.84	88,888	0.88

*Applicant's estimate includes 6.3 days of operating capacity and the staff estimate includes 6 days.

Both estimates are subject to certain infirmities. The staff did not ascertain the costs for a specific location for the substitute plant. Therefore, it is not possible to determine whether the general estimates are sufficient to cover the costs which might be experienced at a site, in or about the city of Milwaukee, which would be properly located; both with respect to availability of railroad sidings and location of the applicant's transmission mains. The estimate submitted by the applicant is grossly excessive. Some precautions included by the applicant would even provide stand-by service for the alternative stand-by plant. The costs submitted are little, if any, below those which would be incurred in regular and continuous operation. It should be kept in mind that the equipment being considered, even under the

most adverse circumstances, would be used very infrequently and then only for periods of short duration. Conceivably, the equipment might not be required to be used for a period of several years. Under the circumstances, it would be manifestly unfair to burden the rate-payer with excessive fixed and operating costs of stand-by equipment, where such costs are at practically the same level as those which would be experienced, if the plant were required for regular and continuous operation.

The Commission considers that if the staff estimate of annual costs of \$68,968 were adjusted upwards to \$100,000, any underestimate would be more than compensated. This adjustment amounts to approximately \$36,000 per year and would allow for an increase in investment of \$860,000, or an increase in annual operating costs of \$6,000 and an increase in investment of \$300,000. The Commission considers that either of these amounts represent an extremely liberal adjustment and that the total cost of \$100,000 is more than adequate to cover the cost of 110,000 therms of liquefied-petroleum stand-by capacity for a period of 6 days.

The applicant did not submit estimates of the capital or annual cost of 60,000 therms of liquefied-petroleum-gas stand-by which is equivalent to the capacity obtainable by the proposed diversion of the Coke Company surplus gas from the Sewerage Commission to the applicant. The Commission staff did submit estimates for such capacity computed in the same manner as the estimates for 110,000 therms of capacity. Since the stand-by capacity to be provided by the Coke Company is divisible into two parts, the Commission will provide for separate compensation for the two increments of capacity available from the Coke Company. Based upon the Commission staff exhibits as adjusted herein, the Commission considers that the following payments to the Coke Company by the applicant are just and reasonable for the stand-by service to be furnished.

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MILW. GAS LIGHT CO.—CONTRACT WITH AFFILIATE 405

Item 1:	60,000 therms of stand-by capacity to be obtained by diversion of capacity utilized for the Milwaukee Sewerage Commission	\$ 63,000
Item 2:	50,000 therms of stand-by capacity to be obtained from the use by the Coke Company of stand-by underfiring facilities	\$ 37,000
	Total	\$100,000
Item 3:	Rate for gas produced by the Coke Company and required and actually used by the applicant for stand-by purposes—per therm	5¢

The consideration of the necessity for stand-by equipment of the capacity proposed by the applicant is at issue both in this proceeding and in docket CA-2290. The Commission proposes to give full consideration to the entire matter in docket CA-2290. For the purposes of this proceeding, the Commission considers that either the 60,000 therms or the 110,000 therms of stand-by available from the Coke Company at the compensation considered herein is reasonable.

FINDINGS OF FACT

THE COMMISSION FINDS:

1. That the contract between Milwaukee Gas Light Company and Milwaukee Solvay Coke Company dated as of May 12, 1949, which is the subject of the application in this docket is not reasonable and consistent with the public interest insofar as said contract relates to charges for stand-by service.
2. That the amount which is reasonable for stand-by service furnished by Milwaukee Solvay Coke Company to Milwaukee Gas Light Company is \$63,000 annually for 60,000 therms of stand-by capacity to be obtained by diversion of capacity available for delivery of gas for the Milwaukee Sewerage Commission and \$37,000 for 50,000 therms of stand-by capacity to be obtained from capacity available from the use of stand-by underfiring equipment of Milwaukee Solvay Coke Company.
3. That a price of 5 cents per therm is a reasonable price for any gas actually required and delivered by Mil-

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PUBLIC SERVICE COMMISSION OF WISCONSIN

SAWYER COUNTY

waukee Solvay Coke Company to Milwaukee Gas Light Company for stand-by purposes.

4. That the price as set forth in the contract for surplus coke-oven gas supplied by Milwaukee Solvay Coke Company to Milwaukee Gas Light Company for resale to the Milwaukee Sewerage Commission is fair and reasonable.

CONCLUSIONS OF LAW

THE COMMISSION CONCLUDES:

That an order should be entered disapproving the aforesaid contract, except insofar as said contract relates to the price to be paid for surplus coke-oven gas.

ORDER

IT IS THEREFORE ORDERED:

1. That the contract between Milwaukee Gas Light Company and Milwaukee Solvay Coke Company bearing date as of May 12, 1949, which is the subject of the application in this docket insofar as it relates to charges for stand-by service be and the same is hereby disapproved.

2. That the aforesaid contract insofar as it relates to the price for surplus coke-oven gas to be paid by Milwaukee Gas Light Company to Milwaukee Solvay Coke Company be and the same is hereby approved.

Application of Sawyer County to Enlarge an Existing Dam in the Chief River, a dam is located in the quarter of section 1, T. 14 N., R. 10 E., S. 10. The applicant proposes to raise the elevation of the dam from 90.5 feet to 91.5 feet; to increase the length of the dam; and also to change the nature of the dam. Permit issued, and in

APPLICATION OF THE SAWYER COUNTY TO ENLARGE THE SO-CALLED CHIEF RIVER DAM. The applicant proposes to raise the elevation of the dam from 90.5 feet to 91.5 feet; to increase the length of the dam; and also to change the nature of the dam. Permit issued, and in

Sawyer County on April 25, 1949, to enlarge an existing dam on the Chief River, a dam is located in the quarter of section 1, T. 14 N., R. 10 E., S. 10. The applicant proposes to raise the elevation of the dam from 90.5 feet to 91.5 feet; to increase the length of the dam; and also to change the nature of the dam. Permit issued, and in

Elevations hereinafter mentioned are from the mission bench mark at the top of upstream dam. Its elevation is 90.5 feet. A hearing was held on April 25, 1949, before Examiner W. H. Sawyer.

Sawyer County agent, Hayward. Owners of property affected, Douglas and C. Omernik.

As a condition of the permit, the applicant is required to construct a dam on the Chief River, Black River, Great Lakes. Charles H. Rore.

J. E. Price, c

WARRANTY DEED

THIS INDENTURE, made this 1st day of June A.D., 1962, between MILWAUKEE SOLVAY COKE COMPANY, a Corporation duly organized and existing under and by virtue of the laws of the State of Wisconsin, located at Milwaukee, Wisconsin, party of the first part, and WISCONSIN COKE COMPANY, INC., a Corporation duly organized and existing under and by virtue of the laws of the State of Wisconsin, located at Milwaukee, Wisconsin, party of the second part.

WITNESSETH, that the said party of the first part, for and in consideration of the sum of One dollar (\$1.00) and other good and valuable consideration to it paid by the said party of the second part, the receipt whereof is hereby confessed and acknowledged, has given, granted, bargained, sold, remised, released, aliened, conveyed and confirmed, and by these presents does give, grant, bargain, sell, remise, release, alien, convey and confirm unto the said party of the second part, its successors and assigns forever, the following described real estate situated in the County of Milwaukee and State of Wisconsin, to-wit:

That part of the Southwest 1/4 of Section 33, Township 7 North, Range 22 East and the Southeast 1/4 of Section 32, Township 7 North, Range 22 East, in the City of Milwaukee, Milwaukee County, Wisconsin, which is bounded and described as follows: Commencing at the South section corner between Sections 32 and 33 aforesaid; running thence North 00° 16' 36" East along the Section line between Sections 32 and 33 aforesaid 388.00 ft. to a point, said point lying in the center line extended East of East Madison Street; thence South 89° 56' 29" West along the center line extended East of East Madison Street 49.70 ft. to a point, thence North 03° 31' 36" East and parallel to the East line of the Chicago, Milwaukee, St. Paul and Pacific Railroad Company right of way 310.00 ft., more or less, to a point in the Westerly line of the Chicago and Northwestern Railroad Company right of way, said point being 125.2 ft. Westerly, as measured radially from the Easterly line of the Chicago and Northwestern Railroad Company right of way; thence Southerly along the Westerly line of the Chicago and Northwestern Railroad Company right of way 503.64 ft. on the arc of a curve whose center lies to the East, whose radius is 2694.29 ft. and whose chord bears South 11° 52' 26" East 502.90 ft. to a point, said point being 155.15 ft. North of the

North line of East Greenfield Avenue; thence North $89^{\circ} 56' 29''$ East and parallel to the North line of East Greenfield Avenue 26.39 ft. to a point on the Westerly line of the Chicago and Northwestern Railroad Company right of way, said point being 100.00 ft. Westerly as measured radially, from the Easterly line of the Chicago and Northwestern Railroad Company right of way; thence Southerly along the Westerly line of the Chicago and Northwestern Railroad Company right of way 217.91 ft. on the arc of a curve whose center lies to the East, whose radius is 2669.09 ft. and whose chord bears South $19^{\circ} 44' 06''$ East 217.85 ft. to a point in the South line of said Section 33; thence South $89^{\circ} 56' 29''$ West along the South line of Section 33 aforesaid 174.67 ft. to the point of commencement; excepting therefrom the South 50.00 ft. as taken for East Greenfield Avenue.

That part of Lots 1, 2, 3, 4, 5 and 7 in the Partition of that part of the Northwest $1/4$ of Section 4, Township 6 North, Range 22 East in the City of Milwaukee, Milwaukee County, Wisconsin, lying West of the $1/4$ Section Line, which is bounded and described as follows: Commencing at a point in the North line of said $1/4$ Section 116.01 ft. North $89^{\circ} 56' 29''$ East of the Northwest corner of said $1/4$ Section; running thence North $89^{\circ} 56' 29''$ East along the North line of said $1/4$ Section 1460.07 ft. to a point in the Westerly dock line of the Kinnickinnic River; thence South $21^{\circ} 32' 49''$ West along the Westerly dock line of the Kinnickinnic River 842.70 ft. to a point; thence South $89^{\circ} 25' 22''$ West 359.42 ft. to a point in the Northeasterly line of the Chicago and Northwestern Railroad Company right of way, said point being 770.75 ft. South of the South line of East Greenfield Avenue; thence South $39^{\circ} 06' 20''$ East along the Northeasterly line of the Chicago and Northwestern Railroad Company right of way 381.98 ft. to a point in the Westerly dock line of the Kinnickinnic River; thence South $21^{\circ} 32' 49''$ West along the Westerly dock line of the Kinnickinnic River 57.25 ft. to a point; thence South $16^{\circ} 01' 51''$ West along the Westerly dock line of the Kinnickinnic River 54.28 ft. to a point; thence South $20^{\circ} 59' 55''$ West along the Westerly dock line of the Kinnickinnic River 736.17 ft. to a point; thence North $74^{\circ} 49' 58''$ West 464.11 ft. to a point in the North line of Lot 7 aforesaid, said point being 424.30 ft. East of the Northwest corner of said Lot 7; thence North $56^{\circ} 39' 10''$ West 365.79 ft. to a point in the East line of the Chicago, Milwaukee, St. Paul and Pacific Railroad Company right of way, said point being 200.00 ft. North of the North line of said Lot 7 and 116.00 ft. East of the West line of said $1/4$ Section; thence North $00^{\circ} 46' 58''$ East along the East line of the Chicago, Milwaukee, St. Paul, and Pacific Railroad Company right of way on a line which is 116.00 ft. East of and parallel to the West line of said $1/4$ Section 1552.63 ft. to the point of commencement; excepting therefrom the right of way of the Chicago and Northwestern Railroad Company 100.00 ft. in width running Northwesterly through said lands; and excepting therefrom the North 16.00 ft. as taken for East Greenfield Avenue.

North line of East Greenfield Avenue; thence North $89^{\circ} 56' 29''$ East and parallel to the North line of East Greenfield Avenue 26.39 ft. to a point on the Westerly line of the Chicago and Northwestern Railroad Company right of way, said point being 100.00 ft. Westerly as measured radially, from the Easterly line of the Chicago and Northwestern Railroad Company right of way; thence Southerly along the Westerly line of the Chicago and Northwestern Railroad Company right of way 217.91 ft. on the arc of a curve whose center lies to the East, whose radius is 2669.09 ft. and whose chord bears South $19^{\circ} 44' 06''$ East 217.85 ft. to a point in the South line of said Section 33; thence South $89^{\circ} 56' 29''$ West along the South line of Section 33 aforesaid 174.67 ft. to the point of commencement; excepting therefrom the South 50.00 ft. as taken for East Greenfield Avenue.

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TOGETHER with all and singular the hereditaments and appurtenances therunto belonging or in any wise appertaining; and all the estate, right, title, interest, claim or demand whatsoever, of the said party of the first part, either in law or equity, either in possession or expectancy of, in and to the above bargained premises, and their hereditaments and appurtenances.

TO HAVE AND TO HOLD the said premises as above described with the hereditaments and appurtenances, unto the said party of the second part, and to its successors and assigns FOREVER.

AND THE SAID Milwaukee Solvay Coke Company, party of the first part, for itself and its successors, does covenant, grant, bargain and agree to and with the said party of the second part, its successors and assigns, that at the time of the enclosing and delivery of these presents it is well seized of the premises above described, as of a good, sure, perfect, absolute and indefeasible estate of inheritance in the law, in fee simple, and that the same are free and clear from all incumbrances whatever, excepting:

- (i) taxes and assessments, general or special, levied or to be levied from and after January 1, 1961;
- (ii) municipal and zoning ordinances and other laws, rules and regulations promulgated by duly constituted authority regulating or restricting the use or enjoyment of said premises and appurtenances thereto;
- (iii) right of the public and any public authority in and to that portion of said premises lying within the limits of public highways and navigable streams abutting on or adjacent to said premises;
- (iv) rights and easements, if any, in and to any and all railroad switches, sidetracks, spur tracks and rights of way located upon or appurtenant to said premises; and
- (v) rights, easements and grants to third parties to use or enjoy portions of said premises as rights of way or for the location or maintenance of facilities or of appurtenances to other premises, or for other purposes therein granted, existing as of the date hereof, and arising pursuant to instruments of record, or referred to of record, or under instruments assigned by the Grantor to the Grantee named herein;

and that, except as aforesaid, the above bargained premises in the quiet and peaceable possession of the said party of the second part, its successors and assigns, against all and every person or persons lawfully claiming the whole or any part thereof, it will forever WARRANT AND DEFEND.

IN WITNESS WHEREOF, the said Milwaukee Solvay Coke Com-
pany, party of the first part, has caused these presents to be signed by
_____, its Executive Vice President, and
countersigned by _____, its Secretary, at
Milwaukee, Wisconsin, and its corporate seal to be hereunto affixed, this
1st day of June, A.D., 1962.

SIGNED AND SEALED IN PRESENCE OF

MILWAUKEE SOLWAY COKE COMPANY

REPORT OF THE COMMISSIONER

COUNTY ASSIGNED:

Secretary

STATE OF WISCONSIN)
) ss.
MILWAUKEE COUNTY)

Personally came before me, this 1st day of June, A.D., 1962, _____, Executive Vice President, and _____, Secretary of the above named Corporation, to me known to be the persons who executed the foregoing instrument, and to me known to be such Executive Vice President and Secretary of said Corporation, and acknowledged that they executed the foregoing instrument as such officers as the deed of said Corporation, by its authority.

Notary Public, Milwaukee County,
Wisconsin
My commission expires: